

**UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

**Chemical and Statistical Analysis of Stream Sediments,
Heavy-Mineral Concentrates, and Rocks of the
Hells Gate Roadless Area, Gila County, Arizona**

by

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STUDIES RELATED TO WILDERNESS

The Wilderness Act (Public Law 88-577, September 3, 1964) and related acts require the U.S. Geological Survey and the U.S. Bureau of Mines to survey certain areas on Federal lands to determine their mineral resource potential. Results must be made available to the public and be submitted to the President and the Congress. This report presents the results of a mineral resource potential survey of the Hells Gate Roadless Area in the Tonto National Forest, Gila County, Arizona. Hells Gate Roadless Area was classified as a further planning area (03021) during the Second Roadless Area Review and Evaluation (RARE II) by the U.S. Forest Service, January 1979.

INTRODUCTION

Purpose of Study

A geochemical reconnaissance study was conducted in the Hells Gate Roadless Area, in Gila County, Arizona, in the fall of 1980, to aid in a mineral resource appraisal of the area. The sample media consisted of rocks, stream sediments, and heavy-mineral concentrates from stream sediments. All the samples were analyzed by semiquantitative emission spectrographic techniques. In addition, the rock samples underwent colorimetric and atomic-absorption spectrometry analysis. This report presents a tabulation of chemical and selected statistical analysis.

Location of the Hells Gate Roadless Area

The Hells Gate Roadless Area encompasses approximately 31,200 acres in the northern part of the Tonto National Forest in Gila County, Ariz. (fig. 1). The study area included parts of the Diamond Point, McDonald Mountain, Gisela, Payson South, Sheep Basin Mountain, Promontory Butte, and Diamond Butte 7.5-minute quadrangles. The area is roughly a 4- by 15-mile strip along a deeply incised segment of upper Tonto Creek. Elevations range from 3,000 feet in the lower gorge to 6,000 feet in the hills above the upper gorge. Local relief in the canyon is commonly greater than 1,000 feet.

Geologic Setting

In the Tonto Basin, Proterozoic stratified and plutonic rocks (1.7 b.y.) are unconformably overlain by the Proterozoic Apache Group (>1.2 b.y.). The gently dipping Apache strata are unconformably overlain by the Paleozoic sandstone, shale, and limestone sequence of the Mogollon Rim. Tonto Basin is a part of the Colorado Plateau's province margin that has been slightly structurally disrupted by late Cenozoic faulting, and from which the Paleozoic strata have been largely stripped by subsequent erosion.

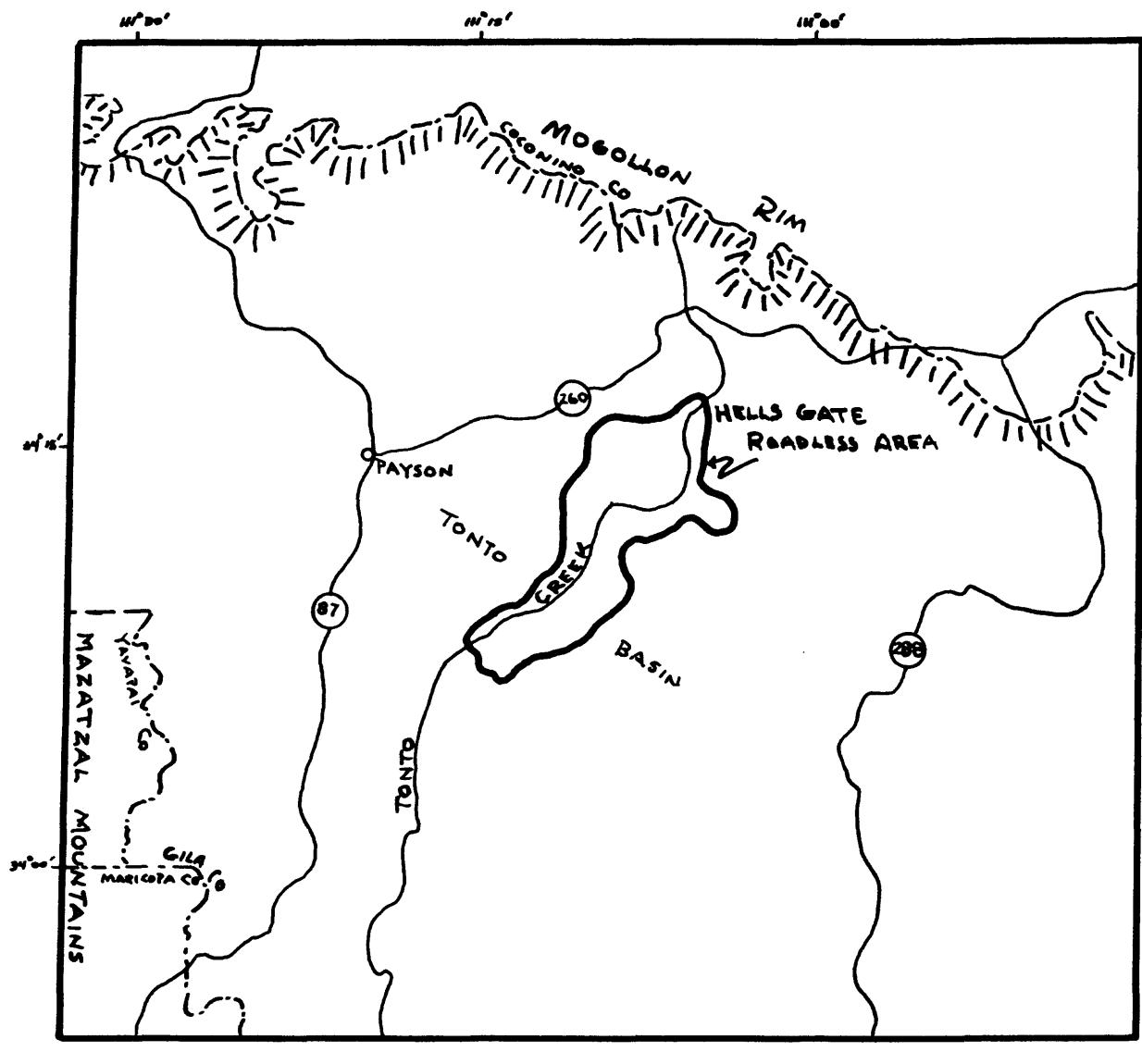
Proterozoic stratified rocks and sheets of intrusive rocks exposed in the Hells Gate Roadless Area occupy the axis of a northeast-trending synclinorium. Quartzite and underlying alkalic extrusive rhyolite constitute the upper one-third of a 20,000-foot-thick stratified sequence exposed in the axis and southeast limb of the synclinorium. Sedimentary, volcaniclastic, and volcanic rocks of the lower two-thirds of the sequence lie outside the Hells Gate Area. Intrusive alkalic rhyolite, granophyre, and granite occupy the axis and northwest limb of the synclinorium and intrude the extrusive rhyolite and quartzite.

The folds of the synclinorium and the thrust faults in Tonto Basin are the result of a compressional orogenic event (Mazatzal orogeny). Foliation is weak to imperceptible in the massive igneous and quartzite bodies of the area. Deformation appears to have occurred at shallow depths as indicated by brittle rupture along the faults and by the low grade greenschist facies of metamorphism.

Mineral Occurrences

The Hells Gate Area has no history of mining and little evidence of prospecting. Few claims have been recorded and most are placer claims in modern alluvium along Tonto Creek and its tributaries. Claims exist at several places within 2 to 5 miles of the Hells Gate periphery, some with small workings, for gold, silver, copper, beryllium, and barite. Some are along faults that extend into the Roadless Area.

Anomalous values of tin, beryllium, and niobium and the presence of cassiterite in heavy-mineral concentrates are indicative of late-magmatic mineralizing processes, and possible deposits of these elements, though evidence for such concentrations is lacking.



0 6 12 MILES

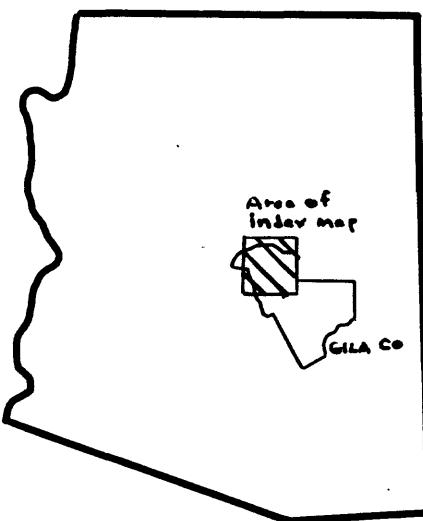


Figure 1. Location of the Hells Gate Roadless Area,
Arizona.

SAMPLE COLLECTION AND PREPARATION

Stream Sediments

A total of 85 stream-sediment samples were gathered from drainages throughout the study area. Each sample was composited from active alluvium in order to determine the elemental constituents of rocks that were eroded upstream from the sample site. The samples were later sieved to 0.18 mm (-80 mesh) and pulverized prior to analysis.

Heavy-Mineral Concentrates

A total of 85 heavy-mineral concentrates were collected in selected drainages throughout the study area. The concentrate medium, which contains sulfide minerals and their oxidation products, as well as the precious metals (McCarthy and Lovering, 1978), greatly enhances the capacity to determine anomalous elemental suites because many of the rock-forming minerals (quartz and feldspars) that can dilute stream-sediment samples are removed when they are processed prior to analysis.

In the Hells Gate Roadless Area, a bulk sample of active alluvium sediment was collected and sieved through a 2.0-mm (-10-mesh) screen to remove the coarse material. Care was taken to gather the samples from around boulders, rocks, and sand bars (the areas where heavy-minerals tend to congregate) in order to maximize the amount of heavy-mineral concentrate in the sample. The samples were later wet panned, air dried, and passed through a 0.50-mm (-35-mesh) sieve to remove most of the lighter non-heavy-mineral portion of the sample. The remaining light materials were then removed using bromoform (specific gravity 2.86) and discarded. Magnetite was removed from the sample with a hand magnet. The remaining concentrate was separated into two fractions on the basis of their magnetic susceptibility using the Frantz Isodynamic Magnetic Separator set at 0.6 amperes. The nonmagnetic fraction was split into two fractions. One fraction was hand ground with an agate mortar and pestle prior to emission spectrographic analysis and the other fraction was saved for mineralogical study.

Rock Samples

A total of 21 rock samples were collected from mines and areas of observed alteration in order to obtain information concerning mineral suites and trace-element signatures associated with mineralized systems. The samples were crushed and split. One split was pulverized to 0.15 mm (-100 mesh) for analysis and the other split was saved for future study.

ANALYTICAL PROCEDURES

All of the prepared sediment, heavy-mineral concentrate, and rock samples were analyzed by a six-step semiquantitative emission spectrographic method (Grimes and Marranzino, 1968) for 31 elements (Fe, Mg, Ca, Ti, Mn, Ag, As, Au, B, Ba, Be, Bi, Cd, Co, Cr, Cu, La, Mo, Nb, Ni, Pb, Sb, Sc, Sn, Sr, V, W, Y, Zn, Zr, and Th).

Spectrographic results are reported as the approximate geometric mid-points (0.15, 0.2, 0.3, 0.5, 0.7, and 1.0 or relevant powers of ten of these values) of concentration ranges whose respective boundaries are 0.12, 0.18, 0.26, 0.38, 0.56, 0.83, and 1.2 (or relevant powers of ten of these values). The precision of a reported value is plus or minus one reporting value approximately 83 percent of the time and plus or minus two reporting values approximately 96 percent of the time (Motooka and Grimes, 1976).

The lower limits of determination for the 31 elements determined by the emission spectrographic technique are given in table 1. Because of problems dealing with matrix

interference, the spectrographic method was modified for analysis of the heavy-mineral concentrate samples, and the lower limits of determination were raised two reporting values above the normal lower limit value (table 1).

In addition to emission spectrographical analysis, the rock samples were analyzed by colorimetric and atomic-absorption methods for 11 elements. Cu, Pb, Zn, Cd, Bi, and Ag were analyzed by atomic-absorption spectrometry (Viets, 1978). Sb, Au, and Te were analyzed by atomic-absorption techniques developed by Welsch and Chao (1975), Thompson and others (1968), and Chao and others (1978). Arsenic was analyzed by the colorimetric techniques of Ward and others (1963). A modification of the methods of Vaughn and McCarthy (1964) and McNearney and others (1972) was used for the Hg analysis.

ANALYTICAL AND STATISTICAL SUMMARY

Tables 2a, 3a, and 4a list the latitudes, longitudes, and measured concentrations of each element. The values listed for Fe, Mg, Ca, and Ti are reported in percent; all others are in parts per million (ppm). All statistics in this report are based on the data found in these tables.

The results of spectrographic analysis found in tables 2a, 3a, and 4a are classified into two types of data values, qualified and unqualified. Unqualified data can be expressed in terms of a specific number. Sometimes, however, an actual value for a certain element can not be expressed as an exact number and is therefore given a qualitative value. If an element was looked for and not detected, the letter "N" is entered in the tables in place of a numerical value. If an element was observed but was below the lower limit of detection, a "less than" (<) was entered in the tables. If an element was detected at a concentration greater than the upper limit of detection, a "greater than" (>) was entered in the tables. If no analysis was performed for a particular element, two dashes (—) are entered in the tables in place of an analytical value.

The Fisher K statistics (tables 2b, 3b, and 4b) give summary statistics for samples that have undergone spectrographic analysis. This statistical program is helpful in giving the reader a general background on the average abundance of an element and the nature of its distribution for a particular area. The number of qualified and unqualified values are listed (along with the minimum and maximum values for the unqualified data). A qualified value is designated by the following symbols

N=Not detected at the lower limit of determination

L=Detected, but below the limit of reproducible determination for standards used.

H=Interference prevented determination of value

G=Greater than value displayed

B=No analysis

T=Trace (term not used in this data set)

The mean, standard deviation, variance, skewness, and kurtosis for each element are expressed as percent or parts per million, and ignore all qualified values.

The graphical analysis (tables 2c, 3c and 4c) calculates the frequency distribution for each element and presents graphical displays (histograms and contingency tables) that express these frequency distributions. The lower boundary and class intervals used in the histograms are those boundaries and intervals commonly used for spectrographic data. This program also gives percentiles, which rank data values and the geometric mean. Computations in this program ignore all qualified values.

A graphical display will not be shown for an element if any of the following is true.

-No unqualified values are detected.

-Unqualified values are detected at only one sample site.

-Unqualified values are detected at two or more sites, but the minimum and maximum values are the same.

-No analysis was performed for that particular element.

Graphical analysis gives the reader a more specific breakdown on how the different concentrations of an element are distributed. It can be useful in the determination of threshold values and anomalous populations within an area.

When interpreting the statistics given in this report, care should be taken to note the percentage of data that is qualified. The greater the number of qualified data, the less significant the statistics become.

All data listed in tables 2, 3, and 4 were entered into the U.S. Geological Survey Rock Analysis Storage System (RASS), recovered and analyzed statistically by Chris M. McDougal and Barbara Chazin, using the U.S. Geological Survey STATPAC Program Library (Van Trump and Miesch, 1977).

Table 1.—Lower limits of analytical determination for rock, stream sediments, and heavy-mineral concentrates

[The values listed for Fe, Mg, Ca, and Ti are in percent; all others in parts per million]

Element	Rock and Stream Sediment	Heavy-Mineral Concentrate	Element	Rock and Stream Sediment	Heavy-Mineral Concentrate
Iron	0.05	0.1	Lanthanum	20	50
Magnesium	0.02	0.05	Molybdenum	5	10
Calcium	0.05	0.1	Niobium	20	50
Titanium	0.002	0.005	Nickle	5	10
Manganese	10	20	Lead	10	20
Silver	0.5	1.0	Antimony	100	200
Arsenic	200	500	Scandium	100	10
Gold	10	20	Tin	10	20
Boron	10	20	Strontium	50	200
Barium	20	50	Vanadium	10	20
Beryllium	1	2	Tungsten	200	100
Bismuth	10	20	Yttrium	10	20
Cadmium	20	50	Zinc	200	500
Cobalt	5	10	Zirconium	10	20
Chromium	10	20	Thorium	200	500
Copper	5	10			

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Table 2A ²ⁿ Geochemical Data for Stream Sediment Samples

Sample	Latitude	Longitude	Fe-pct.	Mg-pct.	Ca-pct.	Ti-pct.	Mn-pptm	Ag-pptm	As-pptm	Au-pptm	Ba-pptm	B-pptm	Ba-pptm
	s	s	s	s	s	s	s	s	s	s	s	s	s
HG001	34	7 32	111 15 3	3	.5	.20	.3	.700	N	N	1,500	1,000	1,000
HG002	34	7 43	111 14 55	7	1.0	.70	.5	1,000	N	N	50	50	500
HG003	34	7 58	111 14 37	5	.7	.50	.3	500	N	N	50	50	1,000
HG004	34	7 56	111 14 22	3	.5	.50	.3	1,000	N	N	50	50	1,000
HG005	34	8 17	111 14 0	3	.5	.20	.5	1,000	N	N	50	50	1,000
HG006	34	7 43	111 12 44	10	.7	.70	1.0	1,000	50	100	1,000	1,000	1,000
HG007	34	7 35	111 12 47	10	.7	.50	1.0	1,000	50	50	700	700	1,500
HG008	34	8 46	111 12 23	10	.5	.20	1.0	1,000	50	50	50	50	1,500
HG009	34	9 17	111 7 49	7	1.0	.70	.7	1,500	50	20	1,500	1,500	1,500
HG010	34	9 9	111 8 22	10	3.0	2.00	1.0	2,000	N	N	50	50	2,000
HG011	34	9 12	111 8 18	15	3.0	5.00	>1.0	2,000	50	30	700	700	2,000
HG012	34	8 35	111 10 0	7	1.0	.70	1.0	2,000	N	N	50	50	2,000
HG013	34	8 29	111 10 1	10	1.0	1.00	.7	1,500	N	N	50	50	1,500
HG014	34	8 33	111 10 6	7	.7	.50	.5	700	N	N	50	50	1,000
HG015	34	10 2	111 10 33	5	.5	.20	.7	1,500	N	N	50	50	1,000
HG016	34	9 35	111 9 32	5	.7	.70	.5	1,500	N	N	70	70	1,000
HG017	34	9 11	111 11 9	3	.7	.50	.5	1,000	N	N	50	50	1,000
HG018	34	9 19	111 9 53	10	1.0	.70	.7	1,000	N	N	50	50	1,000
HG019	34	9 26	111 11 28	5	.7	.50	.5	1,500	N	N	50	50	1,000
HG020	34	8 57	111 12 19	5	1.5	.70	.5	5,000	N	N	50	50	1,000
HG021	34	9 26	111 12 15	5	.7	.70	.5	1,000	N	N	50	50	1,000
HG022	34	9 0	111 13 10	5	.7	.30	.3	1,000	N	N	30	30	700
HG023	34	8 58	111 13 48	15	.5	.20	.7	1,000	N	N	30	30	700
HG024	34	8 17	111 13 25	5	.7	.30	.3	700	N	N	30	30	1,000
HG025	34	7 33	111 12 43	3	.5	.10	.3	700	N	N	30	30	700
HG026	34	7 12	111 12 17	5	.5	.10	.5	500	N	N	70	70	1,000
HG027	34	7 19	111 11 5	7	1.0	1.00	.7	1,500	N	N	50	50	1,000
HG028	34	10 24	111 9 43	5	.5	.50	.5	1,000	N	N	30	30	1,500
HG029	34	10 39	111 9 48	5	.5	.20	.5	1,500	N	N	70	70	1,000
HG030	34	11 8	111 9 45	.5	.5	.20	.5	1,500	N	N	50	50	1,000
HG031	34	11 0	111 9 30	5	.5	.50	.7	3,000	N	N	50	50	1,500
HG032	34	9 55	111 8 58	5	.5	.50	.5	700	N	N	50	50	1,000
HG033	34	9 39	111 8 25	7	.7	1.00	.7	1,000	N	N	30	30	1,500
HG034	34	8 50	111 7 49	10	1.0	.70	1.0	1,000	N	N	30	30	1,000
HG035	34	8 56	111 7 31	5	.7	.50	.5	1,500	N	N	70	70	1,500
HG036	34	10 22	111 7 6	5	.7	.50	.5	700	N	N	50	50	1,000
HG037	34	11 29	111 8 14	2	.3	.50	.3	500	N	N	50	50	1,000
HG038	34	12 30	111 9 4	5	.5	.20	.7	1,500	N	N	50	50	1,000
HG039	34	11 43	111 9 29	5	.7	.50	.5	1,500	N	N	50	50	1,500
HG040	34	12 48	111 8 57	.5	.7	.07	.3	1,000	N	N	20	20	1,500
HG041	34	12 45	111 8 11	3	.5	.50	.3	1,500	N	N	50	50	1,000
HG042	34	12 47	111 7 32	5	.5	.30	.3	1,000	N	N	50	50	1,000
HG043	34	12 48	111 7 49	5	.5	.10	.5	1,000	N	N	30	30	1,000
HG044	34	12 58	111 8 20	5	.5	.10	.5	1,000	N	N	20	20	1,000
HG045	34	13 34	111 8 53	5	.5	.10	.5	1,500	N	N	20	20	1,000

Table 2A 22 Geochemical Data for Stream Sediment Samples

Sample	Ba-ppm	Bi-ppm	Cd-ppm	Co-ppm	Cr-ppm	Cu-ppm	La-ppm	Mo-ppm	Nb-ppm	Ni-ppm	Pb-ppm	Sb-ppm	Sc-ppm
HG001	1.5	5	70	20	70	N	20	10	50	N	7	N	20
HG002	1.5	10	100	50	50	N	N	20	50	N	20	N	15
HG003	2.0	5	100	50	150	5	50	15	70	N	10	N	10
HG004	1.5	7	100	30	100	<5	20	20	30	N	10	N	10
HG005	1.5	7	100	50	70	<5	30	20	100	N	N	N	N
HG006	1.0	7	150	50	50	<20	30	20	30	30	30	30	30
HG007	1.5	20	300	50	100	<20	50	20	50	20	20	20	20
HG008	2.0	15	150	50	100	20	30	30	50	30	20	20	20
HG009	1.5	10	100	70	100	N	150	30	30	30	30	30	30
HG010	1.5	20	1,500	70	70	N	N	100	20	30	30	30	30
HG011	<1.0	20	700	70	70	N	20	30	30	30	30	30	30
HG012	1.5	30	200	20	70	N	N	30	30	30	30	30	30
HG013	1.5	10	100	70	70	N	N	20	20	20	20	20	20
HG014	1.5	15	100	100	100	<20	30	10	30	30	30	30	30
HG015	1.5	10	100	20	100	5	30	10	30	30	30	30	30
HG016	2.0	7	150	50	100	N	N	30	50	50	50	50	50
HG017	2.0	7	150	50	150	N	N	30	50	50	50	50	50
HG018	1.5	7	100	70	70	N	N	30	30	30	30	30	30
HG019	1.5	15	70	50	100	20	20	20	20	20	20	20	20
HG020	2.0	7	150	50	150	N	N	30	50	50	50	50	50
HG021	2.0	10	100	30	70	5	20	20	70	20	20	20	20
HG022	1.5	7	150	50	500	7	30	15	50	50	50	50	50
HG023	3.0	10	100	50	70	5	70	20	70	20	20	20	20
HG024	1.5	5	100	50	15	<5	30	10	20	20	20	20	20
HG025	H	5	50	50	50	<5	<20	15	10	20	20	20	20
HG026	1.5	7	70	20	50	N	N	20	15	20	20	20	20
HG027	1.0	15	150	30	50	>5	N	N	20	15	15	15	15
HG028	1.0	10	100	20	50	>5	N	N	20	15	15	15	15
HG029	2.0	7	70	30	150	N	N	<20	20	20	20	20	20
HG030	1.5	7	50	20	100	N	N	<20	20	20	20	20	20
HG031	1.0	10	100	15	50	N	N	20	15	20	20	20	20
HG032	1.5	10	100	50	100	N	N	<20	20	20	20	20	20
HG033	1.0	10	100	30	70	N	N	<20	20	20	20	20	20
HG034	1.0	15	150	50	100	N	N	<20	20	20	20	20	20
HG035	1.5	10	100	50	150	5	5	N	N	20	20	20	20
HG036	2.0	7	100	30	70	7	20	50	50	50	50	50	50
HG037	1.0	5	50	50	50	5	50	50	50	50	50	50	50
HG038	1.0	7	50	50	50	5	50	50	50	50	50	50	50
HG039	1.5	5	50	50	50	5	50	50	50	50	50	50	50
HG040	1.5	5	50	50	50	5	50	50	50	50	50	50	50
HG041	1.5	7	50	50	50	5	50	50	50	50	50	50	50
HG042	1.5	5	50	50	50	5	50	50	50	50	50	50	50
HG043	1.5	7	50	50	50	5	50	50	50	50	50	50	50
HG044	1.5	7	50	50	50	5	50	50	50	50	50	50	50
HG045	1.5	5	50	50	50	5	50	50	50	50	50	50	50

Table 2A 22 Geochemical Data for Stream Sediment Samples

Sample	Sn ^r -ppm S	Sr ^r -ppm S	V ^r -ppm S	W ^r -ppm S	Y ^r -ppm S	Zn ^r -ppm S	Zr ^r -ppm S	Th ^r -ppm S
HG001	N	150	70	N	70	N	700	700
HG002	N	<100	150	N	50	N	700	700
HG003	>10	200	100	N	150	N	1,000	700
HG004	N	100	70	N	70	N	700	700
HG005	N	<100	70	N	100	N	700	700
HG006	HG007	300	300	50	N	200	N	700
HG008	HG009	150	150	50	N	300	N	700
HG010	HG011	100	200	100	N	700	N	700
HG012	HG013	300	150	50	N	300	N	700
HG014	HG015	500	150	30	N	300	N	700
HG016	HG017	300	150	50	N	300	N	700
HG018	HG019	100	70	70	N	700	N	700
HG020	HG021	<100	100	100	N	700	N	700
HG022	HG023	300	<100	70	N	700	N	700
HG024	HG025	100	<100	200	N	700	N	700
HG026	HG027	100	100	70	N	700	N	700
HG028	HG029	200	100	150	N	700	N	700
HG030	HG031	<100	<100	100	N	700	N	700
HG032	HG033	100	100	70	N	700	N	700
HG034	HG035	150	100	100	N	700	N	700
HG036	HG037	300	100	70	N	700	N	700
HG038	HG039	<100	<100	70	N	700	N	700
HG040	HG041	300	<100	100	N	700	N	700
HG042	HG043	100	<100	70	N	700	N	700
HG044	HG045	<100	<100	50	N	700	N	700

Table 2A -- Geochemical Data for Stream Sediment Samples--continued

Sample	Latitude	Longitude	Fe-pct. %	Mg-pct. %	Ca-pct. %	Ti-pct. %	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
HG046	34 13 56	111 9 7	.5	.5	.20	.5	2,000	N	N	30	1,000	
HG047	34 14 9	111 9 12	.7	.5	.20	.5	2,000	N	N	30	1,000	
HG048	34 12 47	111 6 23	10	.7	1.00	>1.0	2,000	N	N	20	700	
HG049	34 12 29	111 6 41	5	.5	.20	>1.0	1,500	N	N	30	1,000	
HG050	34 12 25	111 7 19	3	1.5	1.00	.7	3,000	.5	N	30	1,500	
HG051	34 12 41	111 6 54	3	.5	.50	.3	1,500	.7	N	70	700	
HG052	34 12 49	111 5 42	7	1.0	.50	1.0	1,500	1.5	N	30	500	
HG053	34 12 58	111 5 45	3	.7	.50	.3	1,500	<.5	N	100	1,000	
HG054	34 12 57	111 5 17	5	.5	.30	1.0	1,500	N	N	50	700	
HG055	34 13 15	111 4 40	15	1.0	.70	>1.0	1,500	<.5	N	30	700	
HG056	34 12 48	111 3 48	10	.5	.50	>1.0	1,500	N	N	20	700	
HG057	34 12 14	111 3 51	7	1.0	.30	1.0	1,000	N	N	20	500	
HG058	34 11 56	111 3 28	7	.7	.20	1.0	1,500	N	N	70	1,500	
HG059	34 13 25	111 5 32	5	.7	.30	.7	1,500	N	N	70	1,000	
HG060	34 14 15	111 5 2	7	.5	.20	1.0	1,500	N	N	30	700	
HG061	34 14 11	111 4 55	20	.5	.10	>1.0	2,000	.5	N	<10	300	
HG062	34 14 42	111 5 5	3	.5	.15	.3	1,000	N	N	50	1,000	
HG063	34 14 53	111 5 36	3	.7	.30	.3	1,000	N	N	50	1,000	
HG064	34 14 44	111 4 20	7	1.0	.70	>1.0	2,000	N	N	50	1,000	
HG065	34 15 33	111 4 13	5	.7	.50	.7	1,000	.5	N	50	1,000	
HG066	34 15 2	111 4 21	3	.7	.50	.5	1,000	N	N	50	1,000	
HG067	34 15 52	111 4 0	10	.7	.15	1.0	1,000	N	N	30	700	
HG068	34 16 39	111 4 43	5	.7	.30	.5	1,000	N	N	50	1,000	
HG069	34 16 30	111 5 30	3	.7	.30	.3	1,500	N	N	50	1,000	
HG070	34 16 0	111 5 12	7	1.5	.70	.7	1,500	.5	N	70	1,000	
HG071	34 15 8	111 6 43	3	.7	.20	.5	1,000	N	N	50	700	
HG072	34 15 39	111 7 12	3	.5	.20	.3	1,500	N	N	30	700	
HG073	34 15 40	111 8 0	3	.3	.10	.3	700	N	N	30	1,000	
HG074	34 15 50	111 8 20	5	.5	.20	.5	1,000	N	N	100	1,000	
HG075	34 16 20	111 9 10	3	.3	.10	.3	700	N	N	30	300	
HG076	34 14 52	111 10 21	7	.2	.07	.5	500	N	N	20	1,000	
HG077	34 10 41	111 12 5	5	.5	.20	.7	1,000	N	N	50	700	
HG078	34 13 43	111 12 28	10	.7	.30	1.0	1,000	N	N	20	700	
HG079	34 10 58	111 12 14	10	1.0	.50	.7	1,000	N	N	50	700	
HG080	34 11 51	111 12 11	10	1.0	.20	.7	1,500	N	N	50	700	
HG081	34 12 2	111 12 11	7	.5	.15	.7	1,000	.5	N	20	1,000	
HG082	34 12 37	111 12 19	5	.5	1.00	.5	700	N	N	50	1,000	
HG083	34 12 47	111 12 36	10	.5	.10	.5	500	N	N	70	700	
HG084	34 13 17	111 12 58	10	.5	.15	.5	500	.7	N	20	300	
HG085	34 13 14	111 12 59	7	.5	.15	.5	700	1.5	N	50	700	

Table 2A -- Geochemical Data for Stream Sediment Samples--continued

Sample	Ba-ppm	Bi-ppm	Cd-ppm	Co-ppm	Cr ⁶⁺ -ppm	Cu-ppm	La-ppm	Mn-ppm	Ni-ppm	Pb-ppm	Sb ³⁺ -ppm	Sc-ppm
H6046	1.5	N	10	70	20	100	<5	20	15	30	N	15
H6047	1.5	N	10	70	30	100	N	20	20	30	N	15
H6048	2.0	N	15	200	30	N	<20	30	15	20	N	20
H6049	2.0	N	7	150	30	100	N	20	20	15	N	20
H6050	1.5	N	10	100	10	50	N	20	15	70	N	15
H6051	H6052	7	100	50	200	20	<20	50	20	50	N	15
H6053	3.0	N	15	100	50	100	5	20	15	30	N	20
H6054	2.0	N	10	100	30	150	30	20	20	50	N	10
H6055	1.0	N	30	700	30	N	20	70	30	30	N	30
H6056	1.0	N	7	200	20	N	20	50	30	20	N	20
H6057	1.0	N	15	100	30	70	7	20	20	30	N	20
H6058	5.0	N	15	100	30	100	7	20	20	30	N	20
H6059	3.0	N	15	100	30	100	N	20	20	30	N	15
H6060	2.0	N	10	100	10	N	<20	20	20	20	N	15
H6061	1.0	N	30	300	7	N	N	30	50	15	N	30
H6062	2.0	N	7	50	15	50	5	<20	15	20	N	5
H6063	2.0	N	7	70	30	100	<5	20	15	50	N	7
H6064	2.0	N	7	150	70	N	20	30	30	30	N	30
H6065	1.5	N	10	150	50	50	N	20	15	50	N	7
H6066	H6067	2.0	10	100	30	100	<5	20	15	50	N	7
H6068	3.0	N	7	300	50	100	<5	20	15	50	N	15
H6069	3.0	N	10	70	30	100	<5	20	10	30	N	7
H6070	5.0	N	15	150	70	150	20	30	50	50	N	20
H6071	2.0	N	7	70	50	70	N	<20	15	20	N	10
H6072	3.0	N	10	70	30	100	<20	20	20	30	N	10
H6073	2.0	N	7	50	15	>20	N	10	30	50	N	10
H6074	2.0	N	10	100	30	100	5	20	30	50	N	15
H6075	3.0	N	5	30	10	300	5	20	10	20	N	7
H6076	1.5	N	7	30	10	<20	N	20	7	20	N	15
H6077	3.0	N	15	50	50	100	5	20	20	50	N	15
H6078	2.0	N	15	70	70	50	<5	30	50	50	N	20
H6079	3.0	N	15	200	70	200	<5	30	20	50	N	20
H6080	2.0	N	15	100	50	150	5	30	30	50	N	20
H6081	2.0	N	10	100	15	50	20	50	20	10	N	15
H6082	70.0	N	10	50	20	50	15	150	10	50	N	15
H6083	2.0	N	7	50	15	500	100	7	50	20	N	15
H6084	2.0	N	7	50	100	500	100	7	50	20	N	15
H6085	2.0	N	10	70	500	100	5	50	20	50	N	15

Table 2A -- Geochemical Data for Stream Sediment Samples--continued

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Cr-ppm s	Th-ppm s
HG046	N	<100	100	N	70	N	700	N
HG047	N	100	100	N	70	N	700	N
HG048	N	100	300	N	50	<200	200	200
HG049	N	100	150	N	50	N	200	200
HG050	N	<100	70	N	50	N	150	N
HG051	N	100	70	N	70	N	300	N
HG052	N	150	200	N	20	N	150	N
HG053	N	<100	70	<50	70	N	500	N
HG054	N	<100	100	N	70	N	300	N
HG055	N	<100	500	N	50	N	200	N
HG056	N	N	300	N	30	N	200	N
HG057	N	100	150	N	50	N	150	N
HG058	N	150	100	N	70	N	500	N
HG059	N	100	100	N	70	N	700	N
HG060	N	150	N	N	50	N	300	N
HG061	N	15	N	700	N	70	300	200
HG062	N	N	N	50	N	50	N	500
HG063	N	100	50	N	50	N	500	N
HG064	N	150	200	N	50	N	700	N
HG065	N	100	100	N	70	N	700	N
HG066	N	20	<100	70	N	70	N	500
HG067	N	N	100	70	100	N	700	N
HG068	N	N	100	50	70	N	300	100
HG069	N	N	100	50	70	N	700	N
HG070	N	15	150	100	70	N	500	N
HG071	N	N	<100	50	50	N	300	N
HG072	N	N	<100	70	70	N	200	N
HG073	N	N	<100	50	50	N	200	N
HG074	N	N	<100	100	70	N	500	N
HG075	N	N	N	30	100	N	150	N
HG076	N	N	<100	50	50	N	200	N
HG077	N	N	<100	70	70	N	500	N
HG078	N	N	150	150	100	N	700	N
HG079	N	N	150	100	150	N	500	N
HG080	N	N	N	100	100	N	500	<100
HG081	N	N	100	70	50	N	300	N
HG082	N	N	100	70	50	N	500	N
HG083	N	N	<100	100	70	N	500	N
HG084	N	15	N	100	100	N	150	1,000
HG085	N	10	<100	100	100	N	100	1,000

Table 2B - FISHER'S Statistics for Stream Sediment Samples

Table 2B -- FISHER-K Statistics for Stream Sediment Samples

NO	COLUMN	K1 MEAN	K2 STD DEVIATION	K3 VARIANCE	K4 SKEWNESS	K5 KURTOSIS	K6
1	LATITUDE	34.193935	0.0446275	0.0019916	5.29901930 ⁻⁰⁶	0.0596195	-4.53881380 ⁻⁰⁶
2	LONGITUD	111.15147	0.0522656	0.0027317	2.47441150 ⁻⁰⁶	0.0173311	-7.60592500 ⁻⁰⁶
3	S-FEX	6.1882353	3.3611723	11.297479	56.490301	1.4876528	376.47354
4	S-MGX	0.7188235	0.4371156	0.1910700	0.2998784	3.5905119	2.9496560
5	S-CAZ	0.5587059	0.8098307	0.6558257	2.3270055	4.3814189	16.384318
6	S-TIZ	0.5807692	0.2341371	0.0548202	0.0073719	9.1370721	21.243702
7	S-MN	1261.1765	644.96108	415974.79	7.45952730 ⁺⁰⁸	0.5743409	-0.6703691
8	S-AG	0.76666667	0.4242641	0.1800000	0.1114286	2.7804225	13.102928
9	S-AS	300.00000				1.4591092	0.4197531
10	S-AU					0.0136000	9
11	S-B	45.000000	18.659924	348.19277	5257.7138	0.8092213	104977.74
12	S-BA	954.11765	297.43064	88464.986	15971925.	0.6070160	0.8658800
13	S-BE	2.7023810	7.4893977	56.091079	3761.4124	1.20889540 ⁺¹⁰	1.5447062
14	S-BI					255874.13	81.327758
15	S-CO						14
16	S-CO	10.364706	5.3068847	28.163025	295.97030	1.9802918	3805.9567
17	S-CR	136.11765	183.47242	33662.129	35277285.	5.7119288	4.33505200 ⁺¹⁰
18	S-CU	47.552941	73.246568	5365.0597	2249101.9	5.7233103	9.88643170 ⁺⁰⁸
19	S-LA	103.42466	65.366896	4272.8311	1012908.5	3.6265746	3.45655260 ⁺⁰⁸
20	S-MO	6.2105263	2.5072993	6.2865497	44.231166	2.8061434	18.932664
21	S-NB	25.000000	10.000000	100.00000	2752.9412	8510.7323	8.6104400
22	S-NI	24.223529	19.939418	397.58039	31227.876	3.9391726	20.44608
23	S-PB	35.235294	16.545498	273.75350	4727.5084	1.0437411	1.5080100
24	S-SB						23
25	S-SC	15.658824	6.2441457	38.989356	190.87868	0.7840402	648.15485
26	S-SN	17.500000	6.8920244	47.500000	450.00000	1.3745866	0.4263700
27	S-SR	159.00000	113.69939	12927.551	4442716.8	3.0225552	2.3545706
28	S-V	122.00000	105.58003	11147.143	3867526.3	1.81729240 ⁺⁰⁹	10.874074
29	S-W	68.823529	54.607076	2981.9328	994082.97	1.62414090 ⁺⁰⁹	13.070631
30	S-Y	300.00000				6.1048621	4.17071180 ⁺⁰⁸
31	S-ZN	501.19048	230.24034	53010.614	4539233.6	0.3719104	46.904497
32	S-ZR	125.00000	35.355339	1250.0000		-1.35974160 ⁺⁰⁹	-0.4838723
33	S-TH						33

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 3 (S-FEX)

LOG LIMITS - LOWER	LOG LIMITS - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)/+2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	1	1.18	1.18	1.07	1.07
2.500E-01	4.167E-01	1	1	1.18	1.18	4.94	3.14
4.167E-01	5.833E-01	24	25	28.24	29.41	14.46	6.29
5.833E-01	7.500E-01	25	50	29.41	58.82	24.17	0.03
7.500E-01	9.167E-01	16	66	18.82	77.65	23.08	2.17
9.167E-01	1.083E+00	15	81	17.65	95.29	12.59	0.46
1.083E+00	1.250E+00	3	84	3.53	98.82	3.92	0.21
1.250E+00	1.417E+00	1	85	1.18	100.00	0.77	0.07
G		0	85	0.00	100.00	1.07	1.07
H		0	85				
B		0	85				
TOTALS LESS H AND B		85					

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HISTOGRAM FOR VARIABLE 3 (S-FEX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+00 X
 3.162E+00 XXXXXXXXXXXXXXXXXX
 4.642E+00 XXXXXXXXXXXXXXXXXX
 6.813E+00 XXXXXXXXXXXXXXXXXX
 1.000E+01 XXXXXXXXXXXXXXXXXX
 1.468E+01 XXXXX
 2.154E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+00
 MAXIMUM ANTILOG = 2.00000E+01
 GEOMETRIC MEAN = 5.64754E+00
 GEOMETRIC DEVIATION = 1.64948E+00
 VARIANCE OF LOGS = 4.72392E-02

PERCENT TABLE FOR VARIABLE 3 (S-FEX) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	5.572923E+01	3.608214E+00
50.00	7.000009E-01	5.011883E+00
75.00	8.932305E-01	7.820427E+00
90.00	1.033335E+00	1.079779E+01
95.00	1.080557E+00	1.203808E+01

98.00
99.00

1.21113E+00
1.000000E+35
1.000000E+35

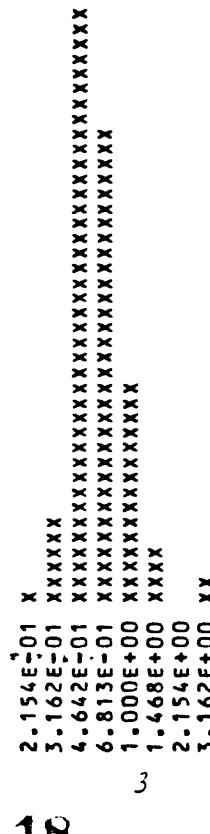
1.625972E+01

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 4 (S-MGX)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ.	PERCENT CUM FREQ.	PERCENT CUM FREQ.	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	1	0.00	0.00		
-7.500E-01	-5.833E-01		1	1.18	1.18	0.14	0.14
-5.833E-01	-4.167E-01		5	5.88	7.06	1.51	0.17
-4.167E-01	-2.500E-01		34	40.00	47.06	8.33	1.33
-2.500E-01	-8.333E-02		27	31.76	78.82	22.17	6.31
-8.333E-02	8.333E-02		13	15.29	94.12	28.62	0.09
8.333E-02	2.500E-01		3	83	97.65	17.93	1.35
2.500E-01	4.167E-01		0	83	0.00	5.44	1.10
4.167E-01	5.833E-01		2	85	2.35	100.00	0.80
G		0	85	0.00	100.00	0.06	0.80
H		0	85			0.14	0.14
B		0	85				
TOTALS LESS H AND B			85				

HISTOGRAM FOR VARIABLE 4 (S-MGX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS



THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 3.00000E+00
 GEOMETRIC MEAN = 6.43939E-01
 GEOMETRIC DEVIATION = 1.54820E+00
 VARIANCE OF LOGS = 3.60339E-02

PERCENT TABLE FOR VARIABLE 4 (S-MGX) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE 1.
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-3.419110E-01	4.550814E-01
50.00	-2.345669E-01	5.826840E-01
75.00	-1.033938E-01	7.881452E-01

90.00	3.846311E+02
95.00	1.250017E-01
98.00	1.000000E+35
99.00	1.000000E+35

1.092605E+00
1.333527E+00
1.000000E+35
1.000000E+35

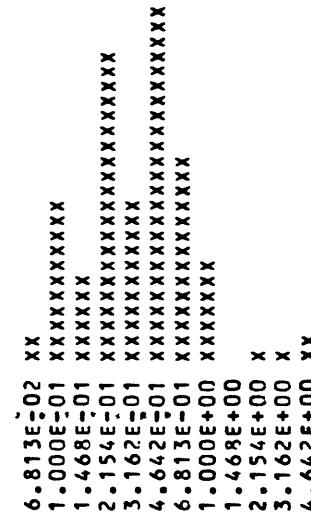
Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE S (S-CAX)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00	0.00		
L		0	0	0.00	0.00	0.00		
T		0	0	0.00	0.00	0.00		
-1.250E+00	-1.083E+00	2	2	2.35	2.35	2.35	1.59	1.59
-1.083E+00	-9.167E-01	9	11	10.59	12.94	2.64	0.16	0.16
-9.167E-01	-7.500E-01	5	16	5.88	18.82	5.35	2.49	2.49
-7.500E-01	-5.833E-01	18	34	21.18	40.00	8.99	1.77	1.77
-5.833E-01	-4.167E-01	9	43	10.59	50.59	14.51	2.38	2.38
-4.167E-01	-2.500E-01	20	63	23.53	74.12	13.95	2.09	2.09
-2.500E-01	-8.333E-02	12	75	14.12	88.24	11.14	2.62	2.62
-8.333E-02	8.333E-02	6	81	7.06	95.29	7.38	0.07	0.07
8.333E-02	2.500E-01	0	81	0.00	95.29	4.06	0.26	0.26
2.500E-01	4.167E-01	1	82	1.18	96.47	1.85	0.39	0.39
4.167E-01	5.833E-01	1	83	1.18	97.65	0.70	0.13	0.13
5.833E-01	7.500E-01	2	85	2.35	100.00	0.29	9.89	9.89
G		0	85	0.00	100.00	1.59	1.59	1.59
H		0	85	0.00	100.00			
B		0	85	0.00	100.00			
TOTALS LESS H AND B			85					

TOTALS LESS H AND B

85

HISTOGRAM FOR VARIABLE S (S-CAX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANILOG = 6.813E-02
 MAXIMUM ANILOG = 1.0000E+00
 GEOMETRIC MEAN = 5.0000E+00
 GEOMETRIC DEVIATION = 3.53183E-01
 VARIANCE OF LOGS = 2.41757E+00
 4.642E+00 = 1.46979E-01.

PERCENT TABLE FOR VARIABLE S (S-CAX) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	7.013878E ⁻⁰¹	1.9888897E ⁻⁰¹
50.00	4.259243E ⁻⁰¹	3.750384E ⁻⁰¹
75.00	2.395813E ⁻⁰¹	5.759950E ⁻⁰¹
90.00	4.166426E ⁻⁰²	9.085226E ⁻⁰¹
95.00	7.639153E ⁻⁰²	1.192316E ⁺⁰⁰
98.00	1.000000E ⁺³⁵	1.000000E ⁺³⁵
99.00	1.000000E ⁺³⁵	1.000000E ⁺³⁵

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 6 (S-TIX)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)*2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
-5.840E-01	-4.173E-01	19	19	22.35	22.35	3.03	3.03
-4.173E-01	-2.507E-01	28	47	32.94	55.29	12.46	3.43
-2.507E-01	-8.400E-02	18	65	21.18	76.47	26.67	0.07
-8.400E-02	8.267E-02	13	78	15.29	91.76	26.89	2.94
8.267E-02	6	7	85	8.24	100.00	15.94	0.54
6	H	0	85			3.03	5.20
H	B	0	85				
TOTALS LESS H AND B		85					

HISTOGRAM FOR VARIABLE 6 (S-TIX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

3.157E-01	XXXXXXXXXXXXXXXXXX
4.634E-01	XXXXXXXXXXXXXXXXXX
6.802E-01	XXXXXXXXXXXXXXXXXX
9.985E-01	XXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E-01
 MAXIMUM ANTILOG = 1.00000E+00
 GEOMETRIC MEAN = 5.35579E-01
 GEOMETRIC DEVIATION = 1.50513E+00
 VARIANCE OF LOGS = 3.15326E-02

PERCENT TABLE FOR VARIABLE 6 (S-TIX) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

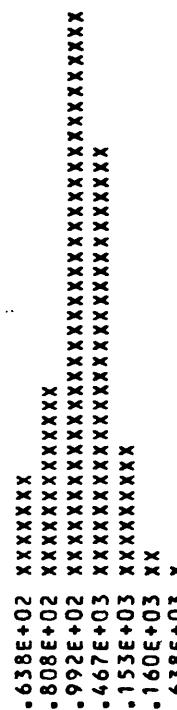
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	4.039401E-01	3.945117E-01
50.00	-2.774518E-01	5.278958E-01
75.00	-9.557310E-02	8.024665E-01
90.00	6.343719E-02	1.157277E+00
95.00	4.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ.	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
2.583E+00	2.750E+00	6	6	7.06	7.06	0.48	0.48
2.750E+00	2.916E+00	11	17	12.94	20.00	1.30	1.30
2.916E+00	3.083E+00	32	49	37.65	57.65	1.00	1.00
3.083E+00	3.250E+00	25	74	29.41	87.06	0.62	0.62
3.250E+00	3.416E+00	8	82	9.41	96.47	0.00	0.00
3.416E+00	3.583E+00	2	84	2.35	98.82	0.68	0.68
3.583E+00	3.750E+00	1	85	1.18	100.00	0.02	0.02
G		0	85	0.00	100.00	2.74	2.74
H		0	85			0.48	0.48
B		0	85				
TOTALS LESS H AND B		85					

HISTOGRAM FOR VARIABLE 7 (S-MN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS



THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+02
MAXIMUM ANTILOG	=	5.00000E+03
GEOMETRIC MEAN	=	1.14361E+03
GEOMETRIC DEVIATION	=	1.54103E+00
VARIANCE OF LOGS	=	3.52725E-02

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.938469E+00	8.678996E+02
50.00	3.046147E+00	1.119816E+03
75.00	3.181335E+00	1.518219E+03
90.00	3.301751E+00	2.003325E+03
95.00	3.390293E+00	2.456367E+03

PERCENT TABLE FOR VARIABLE 7 (S-MN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

98.00
99.00

3.524669E+00
1.000000E+35

3.347099E+03
1.000000E+35

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 8 (S-AG)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		73	73	85.88	85.88		
L		3	76	3.53	89.41		
4.170E-01	-2.503E-01	0	76	0.00	89.41		
2.503E-01	-8.367E-02	5	81	5.88	95.29	3.56	3.56
3.367E-02	8.300E-02	2	83	2.35	97.65	54.51	44.97
8.300E-02	2.497E-01	0	83	0.00	97.65	26.61	22.76
H		0	85	2.35	100.00	0.00	0.00
G		0	85	0.00	100.00	0.31	9.18
B		0	85	0.00	100.00	0.00	0.00
TOTALS LESS H AND B		85					

25
25HISTOGRAM FOR VARIABLE 8 (S-AG)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E-01 XXXXXX
 6.808E-01 XX
 9.992E-01
 1.467E+00 XX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-01
 MAXIMUM ANTILOG = 1.50000E+00
 GEOMETRIC MEAN = 6.87812E-01
 GEOMETRIC DEVIATION = 1.59099E+00
 VARIANCE OF LOGS = 4.066695E-02

PERCENT TABLE FOR VARIABLE 8 (S-AG) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 11 (S-B)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00	0.00		
L		1	1	1.18	1.18	1.18		
1.250E+00	1.417E+00	0	1	0.00	1.18	2.77		
1.417E+00	1.583E+00	11	12	12.94	14.12	10.97		
1.583E+00	1.750E+00	23	35	27.06	41.18	24.34		
1.750E+00	1.917E+00	36	71	42.35	83.53	27.04		
1.917E+00	2.083E+00	11	82	12.94	96.47	15.06		
G		3	85	3.53	100.00	4.82		
H		0	85	0.00	100.00	0.00		
B		0	85					
TOTALS LESS H AND B			85					

HISTOGRAM FOR VARIABLE 11 (S-B)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+01 XXXXXXXX
3.162E+01 XXXXXXXXXXXXXXXXXX
4.642E+01 XXXXXXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXXXX
1.000E+02 XXXX

26 =

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 4.13049E+01
 GEOMETRIC DEVIATION = 1.52669E+00
 VARIANCE OF LOGS = 3.37640E-02

PERCENT TABLE FOR VARIABLE 11 (S-B) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.483696E+00	3.045763E+01
50.00	1.618056E+00	4.150078E+01
75.00	1.716436E+00	5.205184E+01
90.00	1.833335E+00	6.812939E+01
95.00	1.897729E+00	7.901846E+01
98.00	1.600000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

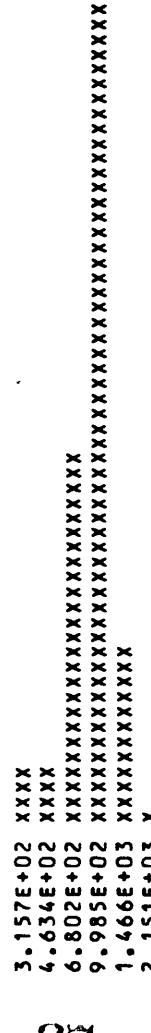
D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 1/14/83

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00	0.00	
L		0	0	0.00	0.00	0.00	
2.416E+00	2.583E+00	0	0	0.00	0.00	0.00	0.01
2.583E+00	2.749E+00	3	3	3.53	3.53	0.47	13.44
2.749E+00	2.916E+00	3	6	3.53	7.06	6.34	1.76
2.916E+00	3.083E+00	21	27	24.71	31.76	26.42	1.11
3.083E+00	3.249E+00	47	74	55.29	87.06	34.96	4.15
3.249E+00	3.416E+00	10	84	11.76	98.82	14.76	1.53
3.416E+00	G	1	85	1.18	100.00	2.04	0.53
H		0	85	0.00	100.00	0.01	0.01
B		0	85				
TOTALS LESS H AND B			85				

HISTOGRAM FOR VARIABLE 12 (S-BA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	3.00000E+02
MAXIMUM ANTILOG	=	2.00000E+03
GEOMETRIC MEAN	=	9.05543E+02
GEOMETRIC DEVIATION	=	1.40589E+00
VARIANCE OF LOGS	=	2.18897E-02

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	3.00000E+02
MAXIMUM ANTILOG	=	2.00000E+03
GEOMETRIC MEAN	=	9.05543E+02
GEOMETRIC DEVIATION	=	1.40589E+00
VARIANCE OF LOGS	=	2.18897E-02

PERCENT TABLE FOR VARIABLE 12 (S-BA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG-OF VALUE
25.00	2.870366E+00	7.419352E+02
50.00	2.970966E+00	9.353317E+02
75.00	3.046320E+00	1.112552E+03
90.00	3.124335E+00	1.331480E+03
95.00	3.195168E+00	1.567358E+03
98.00	3.237668E+00	1.728496E+03
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 13 (S-BE)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
-8.400E-02	8.267E-02	0	0	0.00	0.00		
-8.267E-02	2.493E-01	13	14	0.00	1.18		
2.493E-01	4.160E-01	32	46	15.29	16.47	13.28	
4.160E-01	5.827E-01	26	72	37.65	54.12	21.47	
5.827E-01	7.493E-01	9	81	10.59	95.29	14.14	
7.493E-01	9.160E-01	2	83	2.35	97.65	5.76	
9.160E-01	1.083E+00	1	84	1.18	98.82	1.48	
1.083E+00	1.249E+00	0	84	0.00	98.82	0.24	
1.249E+00	1.416E+00	0	84	0.00	98.82	0.02	
1.416E+00	1.583E+00	0	84	0.00	98.82	0.00	
1.583E+00	1.749E+00	0	84	0.00	98.82	0.00	
1.749E+00	1.916E+00	1	85	1.18	100.00	0.00	
G		0	85	0.00	100.00	0.00	
H		0	85				
B		0	85				
TOTALS LESS H AND B		85					

HISTOGRAM FOR VARIABLE 13 (S-BE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+00
 MAXIMUM ANTILOG = 7.00000E+01
 GEOMETRIC MEAN = 1.8190E+00
 GEOMETRIC DEVIATION = 1.74097E+00
 VARIANCE OF LOGS = 5.79809E-02

PERCENT TABLE FOR VARIABLE 13 (S-BE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION.

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.204275E-01	1.319555E+00
50.00	2.311048E-01	1.702569E+00
75.00	3.631163E-01	2.307365E+00
90.00	4.993345E-01	3.157436E+00
95.00	5.780384E-01	3.786760E+00
98.00	7.993351E-01	6.299922E+00
99.00	1.000000E+35	1.000000E+35

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 16 (S-CO)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00	0.00			
L		0	0	0.00	0.00	0.00			
5.830E+01	7.497E+01	0	0	0.00	0.00	0.00			
7.497E+01	9.163E+01	10	10	11.76	11.76	11.76		1.58	1.58
9.163E+01	1.083E+02	28	38	32.94	44.71	44.71		8.35	0.32
1.083E+02	1.250E+02	26	64	30.59	75.29	75.29		22.59	1.30
1.250E+02	1.416E+02	15	79	17.65	92.94	92.94		28.98	0.31
1.416E+02	1.583E+02	3	82	3.53	96.47	96.47		17.66	0.40
G		3	85	3.53	100.00	100.00		5.10	0.86
H		0	85	0.00	100.00	100.00		0.74	6.90
B		0	85	0.00	100.00	100.00		1.58	1.58
TOTALS LESS H AND B			85						

HISTOGRAM FOR VARIABLE 16 (S-CO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+00 XXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.4667E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXX
3.160E+01 XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 3.00000E+01
GEOMETRIC MEAN = 9.37772E+00
GEOMETRIC DEVIATION = 1.53752E+00
VARIANCE OF LOGS = 3.49021E-02

PERCENT TABLE FOR VARIABLE 16 (S-CO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	8.166314E+01	6.555886E+00
50.00	9.451802E+01	8.814145E+00
75.00	1.081398E+02	1.206142E+01
90.00	1.221890E+02	1.666826E+01
95.00	1.346890E+02	2.222749E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 17 (S-CR)

LOG LOWER LIMITS	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	2	0.00	0.00		
1.416E+00	1.583E+00	2	2	0.00	0.00	1.37	1.37
1.583E+00	1.749E+00	12	14	2.35	2.35	3.90	0.93
1.749E+00	1.916E+00	18	32	14.12	16.47	9.60	0.60
1.916E+00	2.083E+00	29	61	34.12	71.76	20.14	3.90
2.083E+00	2.249E+00	13	74	15.29	87.06	17.18	1.02
2.249E+00	2.416E+00	5	79	5.88	92.94	10.30	2.72
2.416E+00	2.583E+00	3	82	3.53	96.47	4.33	0.41
2.583E+00	2.749E+00	0	82	0.00	96.47	1.28	1.28
2.749E+00	2.916E+00	2	84	2.35	98.82	0.27	11.32
2.916E+00	3.083E+00	0	84	0.00	98.82	0.04	0.04
3.083E+00	3.249E+00	1	85	1.18	100.00	0.00	233.82
G		0	85	0.00	100.00	1.37	1.37
H		0	85				
B		0	85				
TOTALS LESS H AND B		85					

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

31 HISTOGRAM FOR VARIABLE 17 (S-CR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

3.157E+01	XX
4.634E+01	XXXXXXXXXXXXXX
6.802E+01	XXXXXXXXXXXXXXXXXX
9.985E+01	XXXXXXXXXXXXXXXXXX
1.466E+02	XXXXXXXXXXXXXXXXXX
2.151E+02	XXXXXX
3.157E+02	XXX
4.634E+02	
6.803E+02	X
9.985E+02	
1.466E+03	X

PERCENT TABLE FOR VARIABLE 17 (S-CR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

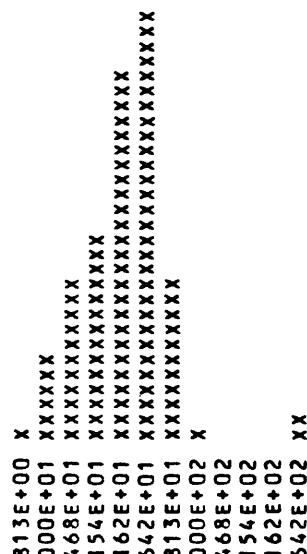
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.816464E+00	6.553356E+01
50.00	1.976346E+00	9.469912E+01
75.00	2.117924E+00	1.311972E+02
90.00	2.332669E+00	2.151139E+02
95.00	2.513224E+00	3.260051E+02
98.00	2.799336E+00	6.299935E+02
99.00	1.000000E+35	1.000000E+35

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 18 (S-CU)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST)	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00	0.00	0.00	
L		0	0	0.00	0.00	0.00	0.00	0.57
T		0	0	0.00	0.00	0.00	0.00	0.57
7.500E-01	9.167E-01	1	1	1.18	1.18	1.18	1.66	0.26
9.167E-01	1.083E+00	5	6	5.88	7.06	7.06	4.55	0.04
1.083E+00	1.250E+00	9	15	10.59	17.65	17.65	9.45	0.02
1.250E+00	1.417E+00	12	27	14.12	31.76	31.76	14.88	0.56
1.417E+00	1.583E+00	21	48	24.71	56.47	56.47	17.78	0.58
1.583E+00	1.750E+00	25	73	29.41	85.88	85.88	16.11	4.91
1.750E+00	1.917E+00	9	82	10.59	96.47	96.47	11.08	0.39
1.917E+00	2.083E+00	1	83	1.18	97.65	97.65	5.78	3.95
2.083E+00	2.250E+00	0	83	0.00	97.65	97.65	2.28	2.28
2.250E+00	2.417E+00	0	83	0.00	97.65	97.65	0.68	0.68
2.417E+00	2.583E+00	0	83	0.00	97.65	97.65	0.16	0.16
2.583E+00	2.750E+00	2	85	2.35	100.00	100.00	0.03	126.27
G		0	85	0.00	100.00	100.00	0.57	0.57
H		0	85					
B		0	85					
TOTALS LESS H AND B		85						

33 HISTOGRAM FOR VARIABLE 18 (S-CU)
MIDPOINTS ARE EXPRESSED AS ANTILOGS



TOTALS LESS H AND B

85

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	= 7.00000E+00
MAXIMUM ANTILOG	= 5.00000E+02
GEOMETRIC MEAN	= 3.34194E+01
GEOMETRIC DEVIATION	= 2.05746E+00
VARIANCE OF LOGS	= 9.81770E+02

PERCENT TABLE FOR VARIABLE 18 (S-CU) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION.

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.336807E+00	2.171734E+01
50.00	1.539684E+00	3.464847E+01
75.00	1.688335E+00	4.879049E+01
90.00	1.814817E+00	6.528553E+01
95.00	1.893521E+00	7.825657E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		9	9	10.59	10.59		
L		3	12	3.53	14.12		
T		0	12	0.00	14.12		
1.583E+00	1.750E+00	15	27	17.65	31.76	14.36	14.36
1.750E+00	1.916E+00	15	42	17.65	49.41	14.99	0.00
1.916E+00	2.083E+00	27	69	31.76	81.18	18.63	0.71
2.083E+00	2.250E+00	11	80	12.94	94.12	17.05	5.81
2.250E+00	2.416E+00	3	83	3.53	97.65	11.49	0.02
2.416E+00	2.583E+00	1	84	1.18	98.82	5.71	1.28
2.583E+00	2.750E+00	1	85	1.18	100.00	2.09	0.57
G		0	85	0.00	100.00	0.69	0.14
H		0	85	0.00	100.00	0.00	0.00
B		0	85	0.00	100.00	0.00	0.00
TOTALS LESS H AND B		85					

HISTOGRAM FOR VARIABLE 19 (S-LA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+01 XXXXXXXXXXXXXXXXX
 6.808E+01 XXXXXXXXXXXXXXXXX
 9.992E+01 XXXXXXXXXXXXXXXXX
 1.4467E+02 XXXXXXXXXXXXXXXXX
 2.153E+02 XXXXX
 3.160E+02 X
 4.638E+02 X

35
TOTALS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
 MAXIMUM ANTILOG = 5.00000E+02
 GEOMETRIC MEAN = 9.14812E+01
 GEOMETRIC DEVIATION = 1.59237E+00
 VARIANCE OF LOGS = 4.08220E-02

PERCENT TABLE FOR VARIABLE 19 (S-LA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION.
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.919420E+00	8.306545E+01
75.00	2.050594E+00	1.123553E+02
90.00	2.196638E+00	1.572670E+02
95.00	2.291335E+00	1.955586E+02

98.00
99.00

2.466335E+00
2.926410E+02
1.000000E+35

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 20 (S-MO)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		52	52	61.18	61.18		
L		14	66	16.47	77.65		
5.830E+01	7.497E+01	0	66	0.00	77.65	2.14	2.14
7.497E+01	9.163E+01	13	79	15.29	92.94	57.06	34.02
9.163E+01	1.083E+02	4	83	4.71	97.65	25.68	18.31
1.083E+00	1.250E+00	1	84	1.18	98.82	0.00	0.00
G		1	85	1.18	100.00	0.12	6.45
H		0	85	0.00	100.00	0.00	0.00
B		0	85				
TOTALS LESS H AND B			85				

HISTOGRAM FOR VARIABLE 20 (S-MO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+00 XXXXXXXXXXXXXXXX
6.808E+00 XXXXX
9.992E+00 X
1.467E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 1.50000E+01
GEOMETRIC MEAN = 5.89779E+00
GEOMETRIC DEVIATION = 1.35012E+00
VARIANCE OF LOGS = 1.69972E-02

PERCENT TABLE FOR VARIABLE 20 (S-MO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00		1.000000E+35
50.00		1.000000E+35
75.00		1.000000E+35
90.00		1.000000E+35
95.00		8.225838E-01
98.00		9.663341E-01
99.00		1.000000E+35

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 21 (S-NB)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT CUM FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	17	17	20.00	20.00		
L	16	33	18.82	38.82	15.71	15.71
T	0	33	0.00	38.82	47.51	2.79
1.250E+00	1.417E+00	36	42.35	81.18	20.62	3.60
1.417E+00	1.583E+00	12	81	14.12	95.29	2.95
1.583E+00	1.750E+00	3	84	3.53	98.82	1.15
1.750E+00	1.917E+00	1	85	1.18	100.00	0.01
G	0	85	0.00	100.00	0.00	0.00
H	0	85				
B	0	85				
TOTALS LESS H AND B	85					

T

B

L

T

G

H

N

A

C

D

E

F

M

P

R

S

U

V

W

X

Y

Z

HISTOGRAM FOR VARIABLE 21 (S-NB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS2.154E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXXXXX
4.642E+01 XXXX
6.813E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 7.00000E+01
GEOMETRIC MEAN = 2.37185E+01
GEOMETRIC DEVIATION = 1.34804E+00
VARIANCE OF LOGS = 1.68231E-02

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

PERCENT TABLE FOR VARIABLE 21 (S-NB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION.
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.520834E+00	3.317675E+01
95.00	1.579862E+00	3.800684E+01
98.00	1.711112E+00	5.141763E+01
99.00	1.900000E+35	1.000000E+35

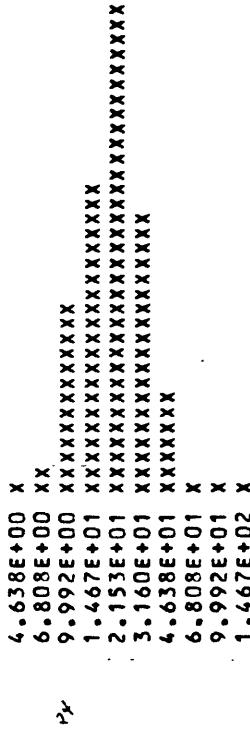
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FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0	0.00	0.00		
L	0	0	0	0.00	0.00		
7.497E-01	7.497E-01	1	1	1.18	1.18	0.00	0.00
9.163E-01	9.163E-01	2	3	2.35	3.53	0.87	0.87
1.083E+00	1.083E+00	11	14	12.94	16.47	3.83	3.83
1.250E+00	1.250E+00	18	32	21.18	37.65	10.78	10.78
1.416E+00	1.416E+00	28	60	32.94	70.59	19.43	19.43
1.583E+00	1.583E+00	16	76	18.82	89.41	22.46	22.46
1.750E+00	1.750E+00	6	82	7.06	96.47	16.64	16.64
1.916E+00	1.916E+00	1	83	1.18	97.65	7.91	7.91
2.083E+00	2.083E+00	1	84	1.18	98.82	0.47	0.47
G	0	0	85	1.18	100.00	0.06	0.06
H	0	0	85	0.00	100.00	0.14	0.14
B	0	0	85				
TOTALS LESS H AND B		85					

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HISTOGRAM FOR VARIABLE 22 (S-NI)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
 MAXIMUM ANTILOG = 1.50000E+02
 GEOMETRIC MEAN = 2.01354E+01
 GEOMETRIC DEVIATION = 1.7588E+00
 VARIANCE OF LOGS = 6.01410E-02

SELECTED DATA VALUE ANTI LOG OF VALUE
 PERCENTILE

PERCENT TABLE FOR VARIABLE 22 (S-NI) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

25.00	1.150131E+00
50.00	1.312168E+00
75.00	1.455398E+00
90.00	1.596891E+00
95.00	1.714947E+00
98.00	1.966336E+00
99.00	1.000000E+35

25.00	1.412963E+01
50.00	2.051956E+01
75.00	2.853629E+01
90.00	3.952673E+01
95.00	5.187364E+01
98.00	9.254141E+01
99.00	1.000000E+35

Table 2A-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 23 (S-PB)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
1.160E+01	1.083E+00	0	0	0.00	0.00	0.15	
1.083E+00	1.249E+00	1	1	1.18	1.18	1.41	0.12
1.249E+00	1.416E+00	5	6	5.88	7.06	7.29	0.72
1.416E+00	1.583E+00	21	27	24.71	31.76	19.60	0.10
1.583E+00	1.749E+00	27	54	31.76	63.53	27.40	0.01
1.749E+00	1.916E+00	26	80	30.59	94.12	19.95	1.83
1.916E+00	2.083E+00	4	84	4.71	98.82	7.56	1.68
G		1	85	1.18	100.00	1.65	0.25
H		0	85	0.00	100.00	0.15	0.15
B		0	85				
TOTALS LESS H AND B		85	85				

HISTOGRAM FOR VARIABLE 23 (S-PB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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9.985E+00 X
1.466E+01 XXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
6.802E+01 XXXXXX
9.985E+01 X

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 3.17412E+01
 GEOMETRIC DEVIATION = 1.58658E+00
 VARIANCE OF LOGS = 4.01851E-02

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.370366E+00	2.346205E+01
50.00	1.3511680E+00	3.248480E+01
75.00	1.645168E+00	4.417414E+01
90.00	1.726899E+00	5.332109E+01
95.00	1.780585E+00	6.033719E+01

PERCENT TABLE FOR VARIABLE 23 (S-PB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

98.00
99.00

1.886835E+00
1.0000000E+35

7.706112E+01
1.0000000E+35

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FREQUENCY TABLE FOR VARIABLE 25 (S-SC)

Table 2C-Sediment Analysis

LOG LIMITS LOWER _ UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00		
7.497E+01	7.497E+01	1	1.18	1.18	0.05	0.05
9.163E+01	9.163E+01	8	9.41	10.59	0.82	0.04
1.083E+02	1.083E+02	17	26	30.59	6.28	0.47
1.250E+02	1.250E+02	32	58	68.24	21.00	0.76
1.416E+02	1.416E+02	19	77	22.35	30.77	0.05
1.583E+02	1.583E+02	8	85	90.59	19.79	0.03
G	0	85	0.00	100.00	6.30	0.46
H	0	85	0.00	100.00	0.05	0.05
B	0	85				
TOTALS LESS H AND B		85				

HISTOGRAM FOR VARIABLE 25 (S-SC)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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4.638E+00 X
6.808E+00 XXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
3.160E+01 XXXXXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
 MAXIMUM ANTILOG = 3.00000E+01
 GEOMETRIC MEAN = 1.44666E+01
 GEOMETRIC DEVIATION = 1.50316E+00
 VARIANCE OF LOGS = 3.13305E-02

PERCENT TABLE FOR VARIABLE 25 (S-SC) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.036432E+00	1.087508E+01
50.00	1.168939E+00	1.475498E+01
75.00	1.300107E+00	1.995753E+01
90.00	1.411949E+00	2.581957E+01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

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Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 26 (S-SN)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	78	78	91.76	91.76			
L	1	79	1.18	92.94			
9.160E-01	1.083E+00	0	79	0.0	92.94	6.18	6.18
1.083E+00	1.249E+00	1	80	1.18	94.12	65.05	63.06
1.249E+00	1.416E+00	3	83	3.53	97.65	13.75	8.40
1.416E+00	1.583E+00	1	84	1.18	98.82	0.00	0.00
1.583E+00	2.151E+01	1	85	1.18	100.00	0.03	36.76
G	0	85	0.00	100.00			
H	0	85					
B	0	85					
TOTALS LESS H AND B		85					

HISTOGRAM FOR VARIABLE 26 (S-SN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

9.985E+00 X
 1.466E+01 XXXX
 2.151E+01 X
 3.157E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 3.00000E+01
 GEOMETRIC MEAN = 1.65096E+01
 GEOMETRIC DEVIATION = 1.44300E+00
 VARIANCE OF LOGS = 2.53661E-02

PERCENT TABLE FOR VARIABLE 26 (S-SN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.0124334E+00	1.331477E+01
98.00	1.029334E+00	1.992206E+01
99.00	1.000000E+35	1.000000E+35

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 27 (S-SR)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT CUM FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		6	6	7.06	7.06		
L		29	35	34.12	41.18		
1.916E+00	2.083E+00	0	35	0.00	41.18	14.41	14.41
2.083E+00	2.249E+00	29	64	34.12	75.29	28.28	0.02
2.249E+00	2.416E+00	11	75	12.94	88.24	28.14	10.44
2.416E+00	2.583E+00	2	77	2.35	90.59	11.89	8.22
2.583E+00	2.749E+00	6	83	7.06	97.65	2.12	7.09
2.749E+00	2.916E+00	1	84	1.18	98.82	0.16	4.46
G		1	85	1.18	100.00	0.00	198.72
H		0	85	0.00	100.00	0.00	0.00
B		0	85				
TOTALS LESS H AND B		85					

HISTOGRAM FOR VARIABLE 27 (S-SR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

9.985E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+02 XXXXXXXXXXXXXXXX
2.151E+02 X
3.157E+02 XXXXXXX
4.634E+02 X
6.802E+02 X

45 TOTALS LESS H AND B

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.000000E+02
MAXIMUM ANTILOG = 7.00000E+02
GEOMETRIC MEAN = 1.37695E+02
GEOMETRIC DEVIATION = 1.61547E+00
VARIANCE OF LOGS = 4.338886E-02

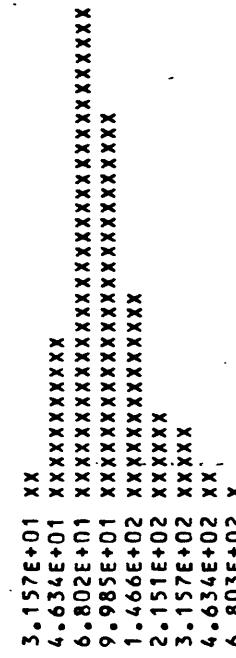
PERCENT TABLE FOR VARIABLE 27 (S-SR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.0000000E+35	1.0000000E+35
50.00	1.0000000E+35	1.0000000E+35
75.00	1.0000000E+35	1.0000000E+35
90.00	2.374334E+00	2.367741E+02
95.00	2.520168E+00	3.312592E+02
98.00	2.632668E+00	4.292083E+02
99.00	1.0000000E+35	1.0000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST) THEOR FREQ (THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00	
L		0	0	0.00	0.00	
1.416E+00	1.583E+00	0	0	0.00	0.00	0.97
1.583E+00	1.749E+00	2	2	2.35	2.35	3.48
1.749E+00	1.916E+00	9	11	10.59	12.94	9.69
1.916E+00	2.083E+00	28	39	32.94	45.88	17.86
2.083E+00	2.249E+00	22	61	25.88	71.76	21.78
2.249E+00	2.416E+00	12	73	14.12	85.88	17.58
2.416E+00	2.583E+00	5	78	5.88	91.76	9.40
2.583E+00	2.749E+00	4	82	4.71	96.47	3.32
2.749E+00	2.916E+00	2	84	2.35	98.82	0.78
G		1	85	1.18	100.00	0.13
H		0	85	0.00	100.00	0.63
B		0	85			0.97
TOTALS LESS H AND B				85		

HISTOGRAM FOR VARIABLE 28 (S-V)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	3.00000E+01
MAXIMUM ANTILOG	=	7.00000E+02
GEOMETRIC MEAN	=	9.91302E+01
GEOMETRIC DEVIATION	=	1.79867E+00
VARIANCE OF LOGS	=	6.50004E-02

PERCENT TABLE FOR VARIABLE 28 (S-V) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	- 1.810346E+00	- 6.461689E+01

50.00	8.760244E+01
75.00	1.320877E+02
90.00	2.322747E+02
95.00	3.393013E+02
98.00	4.909108E+02
99.00	1.000000E+35
	1.942516E+00
	2.120863E+00
	2.366002E+00
	2.530586E+00
	2.691003E+00
	1.0000000E+35

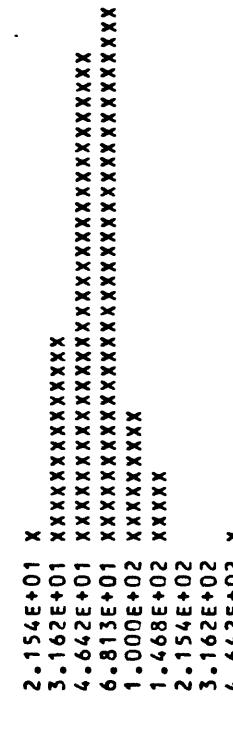
Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 30 (S-Y)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)*2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
1.250E+00	1.417E+00	1.417E+00	1	1.18	1.18	0.41	0.41
1.417E+00	1.583E+00	1.583E+00	12	13	14.12	15.29	1.18
1.583E+00	1.750E+00	1.750E+00	28	41	32.94	48.24	0.06
1.750E+00	1.917E+00	1.917E+00	31	72	36.47	84.71	0.93
1.917E+00	2.083E+00	2.083E+00	8	80	9.41	94.12	0.95
2.083E+00	2.250E+00	2.250E+00	4	84	4.71	98.82	3.60
2.250E+00	2.417E+00	2.417E+00	0	84	0.00	98.82	0.16
2.417E+00	2.583E+00	2.583E+00	0	84	0.00	98.82	0.07
2.583E+00	2.750E+00	2.750E+00	1	85	1.18	100.00	285.20
G		0	85	0.00	100.00		
H		0	85	0.41			
B		0	85				
TOTALS LESS H AND B		85					

TOTALS LESS H AND B

85

HISTOGRAM FOR VARIABLE 30 (S-Y)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 5.00000E+02
 GEOMETRIC MEAN = 6.00914E+01
 GEOMETRIC DEVIATION = 1.60050E+00
 VARIANCE OF LOGS = 4.17208E-02

PERCENT TABLE FOR VARIABLE 30 (S-Y) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED DATA VALUE ANTI LOG OF VALUE
 PERCENTILE 25.00 - 1.632441E+00
 4.289841E+01

50.00	1.758066E+00	5.728825E+01
75.00	1.872313E+00	7.452690E+01
90.00	2.010418E+00	1.024279E+02
95.00	2.114585E+00	1.301922E+02
98.00	2.220835E+00	1.662782E+02
99.00	1.000000E+35	1.000000E+35

FREQUENCY TABLE FOR VARIABLE 32 (S-ZR)

)

LOG LIMITS	LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ
	N	L	0	0	0.00	0.00
	T	2.250E+00	0	0	0.00	0.00
2.083E+00	2.416E+00	2.583E+00	4	4	4.71	4.71
2.250E+00	2.416E+00	2.583E+00	9	13	10.59	15.29
2.416E+00	2.583E+00	2.750E+00	17	30	20.00	35.29
2.583E+00	2.750E+00	2.916E+00	25	55	29.41	64.71
2.750E+00	2.916E+00	3.083E+00	23	78	27.06	91.76
2.916E+00	3.083E+00	G	6	84	7.06	98.82
	H	G	1	85	1.18	100.00
	B	H	0	85		
		TOTALS LESS H AND B	85			

FREQUENCY TABLE FOR VARIABLE 32 (S-ZR)

LOG LIMITS	LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ
	N	L	0	0	0.00	0.00
	T	2.250E+00	0	0	0.00	0.00
2.083E+00	2.416E+00	2.583E+00	4	4	4.71	4.71
2.250E+00	2.416E+00	2.583E+00	9	13	10.59	15.29
2.416E+00	2.583E+00	2.750E+00	17	30	20.00	35.29
2.583E+00	2.750E+00	2.916E+00	25	55	29.41	64.71
2.750E+00	2.916E+00	3.083E+00	23	78	27.06	91.76
2.916E+00	3.083E+00	G	6	84	7.06	98.82
	H	G	1	85	1.18	100.00
	B	H	0	85		
		TOTALS LESS H AND B	85			

Table 2c-Sediment Analysis

HISTOGRAM FOR VARIABLE 32 (S-ZR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

1.467E+02 XXXXX
2.153E+02 XXXXXXXXXX
3.160E+02 XXXXXXXXXXXXXXX
4.638E+02 XXXXXXXXXXXXXXXXXXXXXXX
6.808E+02 XXXXXXXXXXXXXXXXXXXXXXX
9.992E+02 XXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E+02
MAXIMUM ANTILOG = 1.00000E+03
GEOMETRIC MEAN = 4.44683E+02
GEOMETRIC DEVIATION = 1.67576E+00
VARIANCE OF LOGS = 5.02707E-02

PERCENT TABLE FOR VARIABLE 32 (S-ZR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.497217E+00	3.142075E+02
50.00	2.666335E+00	4.638040E+02
75.00	2.6813074E+00	6.502404E+02
90.00	2.905465E+00	8.043877E+02
95.00	2.992724E+00	9.833861E+02
98.00	3.063558E+00	1.157597E+03
99.00	1.0000000E+03	1.0000000E+03

D0036 GRAPHICAL ANALYSIS - USGS STATPAC (02/07/82)

DATE 1/14/83

Table 2c-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 33 (S-TH)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		82	82	96.47	96.47		
L	1	83	1.18	97.65		0.00	
T	0	83	0.00	97.65		0.00	
1.916E+00	2.083E+00	1	84	1.18	98.82	85.00	83.01
2.083E+00	2.249E+00	1	85	1.18	100.00	0.00	960.83
G		0	85	0.00	100.00	0.00	0.00
H		0	85				
B		0	85				
TOTALS LESS H AND B							
85							

HISTOGRAM FOR VARIABLE 33 (S-TH)
MIDPOINTS ARE EXPRESSED AS ANTILOGSST 9.985E+01 X
1.466E+02 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
 MAXIMUM ANTILOG = 1.50000E+02
 GEOMETRIC MEAN = 1.22474E+02
 GEOMETRIC DEVIATION = 1.33203E+00
 VARIANCE OF LOGS = 1.55041E-02

PERCENT TABLE FOR VARIABLE 33 (S-TH) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.000000E+35
50.00	1.00000E+35	1.000000E+35
75.00	1.00000E+35	1.000000E+35
90.00	1.00000E+35	1.000000E+35
95.00	1.00000E+35	1.000000E+35
98.00	1.00000E+35	1.000000E+35
99.00	1.00000E+35	1.000000E+35

Table 3A -- Geochemical Data for Concentrate Samples

Sample	Latitude	Longitude	Fe-pct.	Mg-pct.	Ca-pct.	Ti-pct.	Mn-pptm	Ag-pptm	As-pptm	Au-pptm	B-pptm	Ba-pptm
	s	s	s	s	s	s	s	s	s	s	s	s
HG001C	34° 7' 32"	111° 15' 3"	7.0	5.0	1.50	>2.0	2,000	N	700	100	\$,000	
HG002C	34° 7' 43"	111° 14' 55"	5.0	1.00	15.00	1.5	1,500	N	7,000	20	2,000	
HG003C	34° 7' 58"	111° 14' 37"	7.0	1.00	1.50	>2.0	2,000	N	150	150	3,000	
HG004C	34° 7' 56"	111° 14' 22"	10.0	>7.0	>5.0	>2.0	10,000	N	100	2,000	2,000	
HG005C	34° 7' 58"	111° 14' 0"	7.0	>10	>20	>2.0	1,500	N	30	700	700	
HG006C	34° 7' 43"	111° 12' 44"	5.0	7.0	2.00	>2.0	1,000	N	70	2,000		
HG007C	34° 7' 35"	111° 12' 47"	5.0	7.0	2.00	>2.0	700	N	150	5,000		
HG008C	34° 8' 46"	111° 12' 23"	2.0	>2.0	>5.0	2.0	300	N	30	700		
HG009C	34° 9' 17"	111° 7' 49"	3.0	5.00	10.00	>2.0	700	N	50	>10,000		
HG010C	34° 9' 9"	111° 8' 22"	1.5	>20	20.00	>2.0	500	N	20	>10,000		
HG011C	34° 9' 12"	111° 8' 18"	3.0	10.00	15.00	>2.0	1,000	<1	N	150	7,000	
HG012C	34° 8' 35"	111° 10' 0"	5.0	1.00	2.00	>2.0	700	N	70	5,000		
HG013C	34° 8' 29"	111° 10' 1"	5.0	>7.0	10.00	>2.0	1,000	N	50	>10,000		
HG014C	34° 8' 33"	111° 10' 6"	7.0	>5.0	1.00	>2.0	700	N	70	3,000		
HG015C	34° 10' 2"	111° 10' 33"	2.0	>30	1.00	>2.0	5,000	N	70	1,000		
HG016C	34° 9' 35"	111° 9' 32"	10.0	>30	>5.0	2.0	1,000	N	100	1,500		
HG017C	34° 9' 11"	111° 11' 9"	15.0	>20	>20	2.0	1,000	N	50	1,000		
HG018C	34° 10' 53"	111° 10' 53"	15.0	1.00	3.00	>2.0	2,000	N	50	>10,000		
HG019C	34° 9' 26"	111° 11' 26"	1.5	>70	3.00	>2.0	700	N	50	--	--	
HG020C	34° 8' 57"	111° 12' 19"	1.5	>70	3.00	>2.0	700	N	50	>10,000		
HG021C	34° 9' 26"	111° 12' 15"	1.0	>20	1.00	>2.0	700	N	50	700		
HG022C	34° 9' 0"	111° 13' 10"	2.0	>30	>20	>2.0	700	N	70	1,000		
HG023C	34° 8' 58"	111° 13' 48"	1.5	>50	>50	>2.0	700	N	100	10,000		
HG024C	34° 8' 17"	111° 13' 25"	2.0	>30	1.00	>2.0	1,000	N	200	200	700	
HG025C	34° 7' 33"	111° 12' 43"	1.5	>10	>2.0	>2.0	300	N	70	700		
HG026C	34° 7' 12"	111° 12' 17"	3.0	20	>50	>2.0	500	N	100	5,000		
HG027C	34° 7' 19"	111° 11' 5"	1.5	>30	1.50	>2.0	200	N	50	3,000		
HG028C	34° 10' 24"	111° 9' 43"	10.0	>30	>30	>2.0	1,000	N	100	1,000		
HG029C	34° 10' 39"	111° 9' 48"	5.0	>30	>30	>2.0	700	N	150	10,000		
HG030C	34° 11' 8"	111° 9' 45"	2.0	>30	>50	>2.0	500	N	70	1,000		
HG031C	34° 11' 0"	111° 9' 30"	2.0	>20	>50	>2.0	300	N	50	10,000		
HG032C	34° 9' 55"	111° 8' 58"	3.0	>30	>50	>2.0	1,500	N	50	>10,000		
HG033C	34° 9' 39"	111° 8' 25"	3.0	>50	3.00	>2.0	1,500	N	70	>10,000		
HG034C	34° 8' 50"	111° 7' 49"	3.0	>70	2.00	>2.0	700	N	70	>10,000		
HG035C	34° 8' 56"	111° 7' 31"	7.0	>50	>30	>2.0	1,500	N	150	10,000		
HG036C	34° 10' 21"	111° 7' 5"	5.0	>50	3.00	>2.0	2,000	N	70	10,000		
HG037C	34° 11' 29"	111° 8' 14"	5.0	>20	1.50	>2.0	5,000	N	70	1,500		
HG038C	34° 12' 30"	111° 9' 4"	7.0	>30	2.00	>2.0	2,000	N	70	1,000		
HG039C	34° 11' 43"	111° 9' 29"	15.0	>50	1.00	>2.0	2,000	N	100	1,500		
HG040C	34° 12' 48"	111° 8' 57"	5.0	>30	2.00	>2.0	1,500	N	70	1,000		
HG041C	34° 12' 45"	111° 8' 11"	1.5	>10	>10	>2.0	5,000	N	7,000	3,000		
HG042C	34° 12' 47"	111° 7' 32"	7.0	>20	1.00	>2.0	1,500	N	150	3,000		
HG043C	34° 12' 48"	111° 7' 49"	3.0	>20	1.00	>2.0	1,500	N	70	1,000		
HG044C	34° 12' 58"	111° 8' 20"	2.0	>2.0	1.50	>2.0	1,500	N	70	5,000		
HG045C	34° 13' 34"	111° 8' 53"	3.0	>50	2.00	>2.0	1,500	N	100	1,000		

Table 3A -- Geochemical Data for Concentrate Samples

Sample	Ba-ppm	Bi-ppm	Ce-ppm	Co-ppm	Cr-ppm	Cu-ppm	La-ppm	Mo-ppm	Nb-ppm	Ni-ppm	Pb-ppm	Sb-ppm	Sc-ppm
HG001C	15	<20	10	150	100	1,500	300	150	20	10,000	200	100	100
HG002C	5	N	<10	50	70	70	10	100	10	50	N	50	50
HG003C	50	N	<10	150	70	>2,000	15	700	<10	500	200	200	200
HG004C	50	N	10	150	200	700	20	700	30	300	200	200	100
HG005C	10	N	10	150	50	<50	50	2,000	10	200	300	300	100
HG006C	10	N	10	500	20	200	N	200	30	100	200	70	70
HG007C	50	N	10	500	20	100	N	150	50	70	200	50	70
HG008C	3	N	10	300	30	100	N	300	20	100	200	N	100
HG009C	30	N	10	500	15	200	N	150	50	200	100	100	50
HG010C	<2	N	<10	50	20	150	15	500	10	100	N	N	50
HG011C	15	N	10	150	10	100	N	70	30	500	200	200	70
HG012C	5	N	10	100	30	700	10	300	20	200	<200	100	100
HG013C	5	N	10	200	30	500	30	200	30	150	<200	100	100
HG014C	20	N	10	200	30	2,000	10	1,000	20	150	300	70	70
HG015C	15	N	10	150	20	1,000	N	70	15	200	N	150	150
HG016C	3	N	10	500	30	500	20	200	50	100	200	70	70
HG017C	30	N	10	300	30	300	10	200	50	300	500	N	N
HG018C	2	N	10	100	100	<50	<50	<50	<50	<50	<50	<50	<50
HG019C	<20	N	<10	15	200	10	200	10	300	10	500	N	N
HG020C	10	N	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
HG021C	15	<20	20	150	10	500	<10	100	150	100	500	500	100
HG022C	7	<20	15	150	15	1,000	10	500	10	300	<200	200	200
HG023C	30	200	20	100	15	2,000	10	100	<10	300	<200	200	200
HG024C	50	30	<10	150	15	300	15	150	N	500	300	200	200
HG025C	5	20	10	100	10	200	10	700	<10	100	300	300	70
HG026C	15	N	10	200	15	300	15	300	15	300	200	200	100
HG027C	<2	N	10	300	10	300	N	200	20	200	500	200	100
HG028C	10	N	10	150	50	200	N	200	20	200	300	200	70
HG029C	10	N	10	100	50	1,000	30	700	30	700	30	300	100
HG030C	5	N	10	100	30	200	15	700	20	3,000	N	N	100
HG031C	5	N	10	200	30	500	<10	500	20	500	2,000	100	100
HG032C	5	N	10	150	20	500	10	500	20	500	<200	100	100
HG033C	5	N	10	150	70	300	N	150	20	200	<200	200	200
HG034C	10	N	10	300	10	300	10	300	30	1,500	20	300	150
HG035C	7	N	10	150	10	100	10	150	20	200	300	200	50
HG036C	7	N	10	150	20	200	20	300	N	500	30	200	70
HG037C	2	N	<10	150	20	300	20	300	100	500	200	200	150
HG038C	5	N	<20	10	70	20	20	300	<10	300	200	200	100
HG039C	7	N	<10	100	50	500	20	300	20	300	200	200	100
HG040C	7	N	<10	150	30	300	20	300	N	300	15	500	200
HG041C	5	N	<10	100	70	100	70	100	70	100	500	500	100
HG042C	10	N	<10	70	150	500	500	500	500	500	200	500	70
HG043C	5	N	<10	70	10	100	70	100	70	100	300	300	150
HG044C	5	N	<10	100	100	100	100	100	100	100	300	300	200
HG045C	5	N	<10	100	100	100	100	100	100	100	300	300	200

Table 3A -- Geochemical Data for Concentrate Samples

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
H6001C	1,500	500	700	N	1,500	N	>2,000	N
H6002C	500	1,000	150	N	500	N	>2,000	N
H6003C	200	N	200	N	>5,000	N	>2,000	2,000
H6004C	150	N	200	100	1,000	500	>2,000	N
H6005C	500	N	100	N	1,500	N	>2,000	N
H6006C	50	500	200	N	500	N	>2,000	N
H6007C	20	500	200	N	500	N	>2,000	N
H6008C	30	300	200	N	300	N	>2,000	N
H6009C	30	500	100	N	200	N	>2,000	N
H6010C	20	500	50	N	500	N	>2,000	N
H6011C	N	500	100	N	300	N	2,000	N
H6012C	70	500	70	N	500	N	>2,000	N
H6013C	30	1,500	150	N	500	N	>2,000	N
H6014C	50	700	100	100	1,000	N	>2,000	N
H6015C	300	N	150	N	2,000	N	>2,000	N
H6016C	<20	700	100	N	300	N	>2,000	N
H6017C	50	1,500	100	N	700	N	>2,000	N
H6018C	20	1,500	200	N	200	N	>2,000	N
H6019C	--	--	--	N	--	N	--	N
H6020C	150	<200	100	N	2,000	N	>2,000	N
H6021C	300	N	70	N	2,000	N	>2,000	N
H6022C	2,000	<200	100	N	1,500	N	>2,000	N
H6023C	500	N	100	N	5,000	N	>2,000	500
H6024C	500	N	100	N	5,000	N	>2,000	300
H6025C	100	N	50	100	1,000	N	>2,000	N
H6026C	70	200	100	<100	700	N	>2,000	N
H6027C	<20	500	150	N	300	N	>2,000	N
H6028C	N	200	200	N	200	N	>2,000	N
H6029C	50	300	150	100	700	N	>2,000	N
H6030C	50	N	70	100	700	N	>2,000	N
H6031C	300	N	200	<100	700	N	>2,000	N
H6032C	30	1,500	150	100	500	N	>2,000	N
H6033C	50	1,500	200	N	1,500	N	>2,000	N
H6034C	N	1,500	200	100	1,500	N	>2,000	N
H6035C	100	200	100	150	500	N	>2,000	N
H6036C	50	700	200	<100	300	N	>2,000	N
H6037C	N	500	200	<100	500	N	>2,000	N
H6038C	70	N	100	<100	1,000	N	>2,000	N
H6039C	30	N	<200	150	<100	N	>2,000	N
H6040C	500	N	<200	70	N	N	>2,000	N
H6041C	--	--	--	--	--	--	--	>2,000
H6042C	30	1,500	150	100	1,000	N	--	--
H6043C	20	200	100	100	300	N	>2,000	N
H6044C	20	N	<100	500	500	N	>2,000	N
H6045C	50	N	<100	700	<100	N	>2,000	N

Table 3A -- Geochanical Data for Concentrate Samples--continued

Sample	Latitude	Longitude	Fe-pct.	Mg-pct.	Ca-pct.	Ti-pct.	Mn-pptm	Ag-pptm	As-pptm	Au-pptm	B-pptm	Ba-pptm
	s	s	s	s	s	s	s	s	s	s	s	s
H6046C	34 13 56	111 9 7	5.0	.20	1.00	>2.0	1,000	5,000	70	30	1,500	5,000
H6047C	34 14 9	111 9 12	5.0	.15	1.00	>2.0	700	20	20	20	>10,000	1,500
H6048C	34 12 27	111 6 23	1.0	.20	5.00	>2.0	500	2,000	50	50	3,000	2,000
H6049C	34 12 29	111 6 41	3.0	.20	1.00	>2.0	2,000	2,000	50	50	2,000	
H6050C	34 12 25	111 1 19	3.0	.30	2.00	>2.0			50	50		
H6051C	34 12 41	111 6 54	5.0	.30	2.00	>2.0	5,000	100	100	20	10,000	1,000
H6052C	34 12 49	111 5 42	1.0	.50	5.00	>2.0	300	70	70	70	1,500	
H6053C	34 12 58	111 5 45	3.0	.50	.70	>2.0	5,000	700	700	700	700	
H6054C	34 12 57	111 5 17	3.0	.50	1.50	>2.0	1,500	70	70	700		
H6055C	34 13 15	111 4 40	3.0	.50	10.00	>2.0	1,500	30	30	500		
H6056C	34 12 48	111 3 48	3.0	.50	5.00	>2.0	1,000	N	100	>10,000		
H6057C	34 12 14	111 3 51	5.0	.70	10.00	>2.0	1,500	N	30	500		
H6058C	34 11 56	111 3 28	3.0	.50	1.50	>2.0	1,000	N	100	10,000		
H6059C	34 13 25	111 5 32	5.0	.70	2.00	>2.0	5,000	1,500	700	>10,000		
H6060C	34 14 15	111 5 2	3.0	.20	3.00	>2.0	700	N	100	1,500		
H6061C	34 14 11	111 4 55	1.0	.30	3.00	>2.0	500	N	30	1,000		
H6062C	34 14 42	111 5 55	5.0	.50	.70	>2.0	1,500	N	100	1,000		
H6063C	34 14 53	111 5 36	1.0	.20	3.00	>2.0	1,500	N	50	700		
H6064C	34 14 21	111 4 10	2.0	.20	1.50	>2.0	1,500	N	150	1,000		
H6065C	34 15 33	111 4 13	3.0	.50	1.50	>2.0	700	N	100	500		
H6066C	34 15 2	111 4 21	1.0	.20	.50	>2.0	700	N	70	500		
H6067C	34 15 52	111 4 0	3.0	.20	.20	>2.0	700	N	100	500		
H6068C	34 16 39	111 4 43	3.0	.20	.30	>2.0	700	N	50	500		
H6069C	34 16 30	111 5 30	2.0	.15	.15	>2.0	500	N	50	500		
H6070C	34 16 0	111 5 12	2.0	.50	1.00	>2.0	500	N	70	1,500		
H6071C	34 15 8	111 6 43	3.0	.70	.70	>2.0	1,500	N	70	700		
H6072C	34 15 39	111 7 12	1.0	.15	.15	>2.0	700	N	50	1,000		
H6073C	34 15 40	111 8 0	3.0	.20	.10	>2.0	500	N	50	500		
H6074C	34 15 50	111 8 20	3.0	.30	.15	>2.0	500	N	100	200		
H6075C	34 16 20	111 9 10	2.0	.30								
H6076C	34 15 52	111 10 21	3.0	.30	.15	>2.0	500	N	30	1,500		
H6077C	34 10 41	111 12 5	3.0	.50	.20	>2.0	700	N	150	500		
H6078C	34 13 43	111 12 28	1.0	.30	.15	>2.0	300	N	70	300		
H6079C	34 10 58	111 12 14	1.0	.10	.20	>2.0	200	N	50	700		
H6080C	34 11 51	111 12 11	1.0	.20	2.00	>2.0	300	N	50	10,000		
H6081C	34 12 2	111 12 11	1.0	.30	3.00	>2.0	500	N	30	>10,000		
H6082C	34 12 37	111 12 19	3.0	.70	3.00	>2.0	700	N	70	2,000		
H6083C	34 12 47	111 12 36	3.0	.70	.10	>2.0	300	N	100	>10,000		
H6084C	34 13 17	111 12 58	1.0	.10	.20	>2.0	700	N	20	500		
H6085C	34 13 14	111 12 59	1.0	.20	<.10	>2.0	200	N	50	10,000		

Table 3A -- Geochemical Data for Concentrate Samples--continued

Sample	Ba-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
HG046C	10	N	10	70	20	500	N	300	10	500	200	30	200
HG047C	10	<20	10	100	15	200	N	700	15	70	30	20	30
HG048C	3	N	<10	100	<10	300	N	100	10	20	20	20	20
HG049C	20	N	10	150	15	300	N	700	20	100	30	30	30
HG050C	3	N	10	150	20	500	N	200	20	100	20	20	20
HG051C	10	30	10	150	70	2,000	15	300	20	200	50	50	50
HG052C	42	N	<10	100	15	300	N	700	15	70	15	15	15
HG053C	5	<20	10	150	30	700	30	500	20	150	30	30	30
HG054C	3	N	10	300	70	300	10	500	30	150	30	30	30
HG055C	5	N	10	200	10	500	N	100	30	50	30	30	30
HG056C	3	N	10	300	10	500	N	150	30	100	50	50	50
HG057C	5	N	10	200	15	500	N	700	50	70	30	30	30
HG058C	5	<20	10	200	30	500	30	500	30	200	20	20	20
HG059C	7	N	10	200	50	700	20	200	30	300	50	50	50
HG060C	3	N	10	200	20	500	N	200	20	200	N	N	N
HG061C	2	200	10	150	20	200	10	100	<10	500	50	50	50
HG062C	12	N	10	150	15	300	N	150	20	50	30	30	30
HG063C	20	N	10	150	10	300	30	300	20	150	30	30	30
HG064C	3	<20	10	200	30	300	N	700	20	150	30	30	30
HG065C	15	50	10	300	50	300	N	500	30	100	30	30	30
HG066C	50	30	10	300	50	300	70	300	<10	20,000	200	200	200
HG067C	100	N	10	100	100	<50	N	1,500	10	500	N	200	200
HG068C	100	N	10	70	100	<50	N	1,500	10	300	N	150	150
HG069C	10	N	20	200	150	300	10	300	20	200	N	150	150
HG070C	20	N	20	100	100	300	10	300	20	200	N	150	150
HG071C	2	N	20	100	1,000	300	10	500	10	150	100	100	100
HG072C	12	N	20	100	100	300	N	150	10	100	50	50	50
HG073C	7	70	10	100	1,000	<50	N	1,500	20	200	200	200	200
HG074C	5	N	20	150	150	300	N	500	15	150	150	150	150
HG075C	50	N	20	100	70	300	N	1,500	20	200	200	200	200
HG076C	5	N	10	150	500	200	N	150	20	70	<200	<200	<200
HG077C	50	30	20	100	500	500	<10	100	15	150	150	150	150
HG078C	30	20	20	150	30	50	N	100	10	100	100	100	100
HG079C	20	200	20	100	70	15	N	30	100	100	100	100	100
HG080C	15	N	<10	50	100	N	10	150	<10	30	50	50	50
HG081C	2	N	10	70	500	200	N	100	10	70	70	70	70
HG082C	50	100	20	100	2,000	300	10	200	10	300	300	300	300
HG083C	5	30	20	150	300	2,000	10	700	10	100	100	100	100
HG084C	7	N	10	50	<10	N	N	200	200	<10	50	50	50
HG085C	10	50	20	100	100	200	20	100	10	700	700	700	700

Table 3A -- Geochemical Data for Concentrate Samples--continued

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
HG046C	20	N	100	<100	1,000	N	>2,000	N
HG047C	100	N	70	N	1,000	N	>2,000	N
HG048C	70	500	150	N	500	N	>2,000	N
HG049C	150	<200	150	<100	700	N	>2,000	N
HG050C	50	500	150	N	500	N	>2,000	N
HG051C	700	N	200	<100	2,000	N	>2,000	500
HG052C	N	500	150	N	500	N	>2,000	N
HG053C	700	500	150	<100	700	N	>2,000	N
HG054C	300	200	150	<100	700	N	>2,000	N
HG055C	N	300	300	N	700	N	>2,000	N
HG056C	30	500	200	N	1,000	N	>2,000	N
HG057C	<20	500	300	N	700	N	>2,000	N
HG058C	150	300	150	<100	500	N	>2,000	N
HG059C	150	1,500	200	N	1,000	N	>2,000	N
HG060C	2,000	200	200	N	1,000	N	>2,000	N
HG061C	>2,000	<200	200	N	1,500	N	>2,000	N
HG062C	--	--	--	N	--	N	--	N
HG063C	--	--	--	N	--	N	--	N
HG064C	70	200	200	N	500	N	>2,000	N
HG065C	200	<200	150	N	1,000	N	>2,000	N
HG066C	--	--	--	N	--	N	--	N
HG067C	>2,000	<200	200	N	2,000	N	>2,000	N
HG068C	300	<200	150	100	3,000	N	>2,000	1,000
HG069C	100	N	50	N	500	N	>2,000	N
HG070C	500	200	150	N	1,000	N	>2,000	500
HG071C	150	N	70	N	500	N	>2,000	N
HG072C	--	--	--	N	--	N	--	N
HG073C	500	N	70	N	500	N	>2,000	N
HG074C	200	N	70	N	1,500	N	>2,000	N
HG075C	300	N	70	N	2,000	N	>2,000	300
HG076C	300	N	70	N	500	N	>2,000	N
HG077C	50	N	100	N	3,000	N	>2,000	200
HG078C	100	N	150	N	1,500	N	>2,000	N
HG079C	300	N	50	N	500	N	>2,000	N
HG080C	500	200	70	N	700	N	>2,000	N
HG081C	70	200	50	N	500	N	>2,000	N
HG082C	200	<200	100	N	2,000	N	>2,000	<200
HG083C	150	1,000	150	100	1,500	N	>2,000	N
HG084C	20	N	50	N	500	N	>2,000	N
HG085C	100	N	100	N	1,500	N	>2,000	N

Table 3B -- FISHER-K Statistics for Concentrate Samples

NO COLUMN	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MAXIMUM	MINIMUM	NO
1 LATITUDE	0	0	0	0	85	0	34.277500	34.120000	1
2 LONGITUD	0	0	0	0	85	0	111.25083	111.02194	2
3 S-FEX	0	0	0	0	79	0	15.000000	0.7000000	3
4 S-MGX	0	0	0	0	79	0	0.1000000	10.000000	4
5 S-CAX	0	0	0	0	78	0	0.1000000	20.000000	5
6 S-TIX	0	0	0	0	8	0	2.0000000	1.5000000	6
7 S-MN	0	0	0	0	79	0	70.000000	10000.000	7
8 S-AG	75	0	0	0	8	0	8	8	8
9 S-AS	71	0	0	0	0	0	7000.00000	7000.00000	9
10 S-AU	79	0	0	0	79	0	20.000000	200.00000	10
11 S-B	0	0	0	0	66	0	200.00000	10000.000	11
12 S-BA	0	0	0	0	76	0	2.0000000	100.00000	12
13 S-BE	0	0	0	0	18	0	20.000000	500.00000	13
14 S-BI	50	0	0	0	0	0	0	0	14
15 S-CD	79	0	0	0	0	0	0	0	15
16 S-CO	0	0	0	0	71	0	10.000000	20.000000	16
17 S-CR	0	0	0	0	79	0	50.000000	500.00000	17
18 S-CU	0	0	0	0	77	0	10.000000	2000.00000	18
19 S-LA	3	0	0	0	71	0	50.000000	2000.00000	19
20 S-MO	35	0	0	0	38	0	300.00000	300.00000	20
21 S-NB	0	0	0	0	79	0	70.000000	2000.00000	21
22 S-NI	1	0	0	0	70	0	10.000000	50.0000000	22
23 S-PB	0	0	0	0	79	0	20.000000	20000.00000	23
24 S-SB	53	0	0	0	16	0	200.00000	700.00000	24
25 S-SC	0	0	0	0	79	0	15.000000	200.00000	25
26 S-SN	6	0	0	0	68	0	20.000000	2000.00000	26
27 S-SR	0	0	0	0	42	0	200.00000	1500.00000	27
28 S-V	0	0	0	0	79	0	50.000000	700.00000	28
29 S-W	52	0	0	0	13	0	100.00000	500.00000	29
30 S-Y	0	0	0	0	78	0	200.00000	500.00000	30
31 S-ZN	0	0	0	0	1	0	500.00000	500.00000	31
32 S-ZR	0	0	0	0	1	0	2000.00000	2000.00000	32
33 S-TH	69	0	0	0	8	0	2000.00000	2000.00000	33

Table 3B -- FISHER-K Statistics for Concentrate Samples

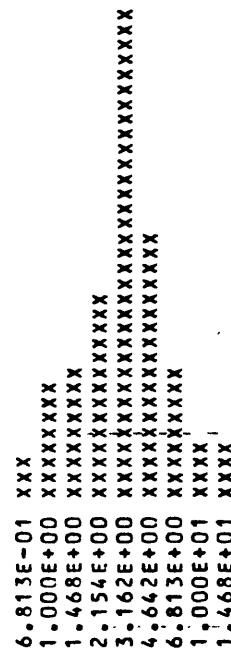
NO	COLUMN	K1	SQRT(K2)	K2	K3	K4	K5	K6	K7
1	LATITUDE	34.194232	0.0447017	0.0019982	5.2545292D-06	0.0588248	-4.4326963D-06	-1.1101213	1
2	LONGITUD	111.15045	0.0541626	0.0029336	-1.4892250D-05	-0.0937265	-7.5742363D-06	-0.8801200	2
3	S-FEX	3.9481013	3.0745381	9.4527848	59.211323	2.0373475	420.70316	4.7082144	3
4	S-MGX	0.5759494	1.2138058	1.4733244	12.125520	6.7803607	107.75780	49.642308	4
5	S-CAX	2.4083333	3.6717898	13.482040	145.70636	2.9433715	1680.5802	9.2458751	5
6	S-TIX	1.9375000	0.1767767	0.0312500	-0.0156250	-2.88284271	0.0078125	8.0000000	6
7	S-MN	1321.1392	1498.6644	2245994.8	1.1586632D+10	3.4422634	7.5837830D+13	15.033787	7
8	S-AG								8
9	S-AS	3525.0000	2899.1378	8405000.0	1.4263857D+10	0.5853699	-1.5518209D+14	-2.1966767	9
10	S-AU								10
11	S-B	73.670886	38.067996	1449.1723	54.827.413	0.9938428	1891593.9	0.9007159	11
12	S-BA	2845.4545	3203.7565	10264056.	4.9126004D+10	1.4939392	8.5776970D+13	0.8142030	12
13	S-BE	14.592105	17.415838	303.31140	12996.177	2.4602686	672897.23	7.3142746	13
14	S-BI	121.1111	135.38133	18328.105	3942091.5	1.58887310	7.5543701D+08	2.2488638	14
15	S-CO								15
16	S-CO	11.830986	3.8022021	14.456740	91.953897	1.67287791	190.07716	0.9094717	16
17	S-CR	166.96203	101.72051	10347.063	1956082.6	1.8584957	4.0627346D+08	3.7947599	17
18	S-CU	121.75325	286.01017	81801.820	1.1012420D+08	4.7069363	1.7451666D+11	26.080202	18
19	S-LA	510.84507	496.00618	246022.13	2.6154012D+08	2.1432708	2.3102519D+11	3.8169017	19
20	S-MO	28.421053	48.756223	2377.1693	580884.48	5.0118679	1.55550860D+08	27.519099	20
21	S-NB	396.58228	359.16886	129002.27	1.0590616D+08	2.2857313	1.0653591D+11	6.4017880	21
22	S-NI	21.571429	11.781306	138.79917	2026.4341	1.2392307	18773.144	0.9744583	22
23	S-PB	771.01266	2551.1514	6508375.3	1.0497984D+11	6.3226220	1.86665759D+15	4.6.065708	23
24	S-SB	281.25000	137.68926	18958.333	6026785.7	2.3087958	1.9978251D+09	5.5584942	24
25	S-SC	87.151899	52.852501	2793.3869	120415.40	0.8156153	-1.152909.5	-0.1477519	25
26	S-SN	247.05882	387.85310	150430.03	1.96041480D+08	3.3600534	2.8026963D+11	12.385313	26
27	S-SR	638.09524	465.36237	216562.14	1.0712381D+08	1.0629485	-1.3946858D+10	-0.2973797	27
28	S-V	140.75949	85.196186	7258.3901	2328171.7	3.7649096	1.2210711D+09	23.177167	28
29	S-W	134.61538	110.65076	12243.590	4759615.4	3.5132472	1.8709936D+09	12.481155	29
30	S-Y	1016.6667	891.28780	794393.94	1.8946619D+09	2.6759490	5.6999195D+12	9.0322693	30
31	S-ZN	500.00000	2000.0000						31
32	S-ZR								32
33	S-TH	662.50000	592.66348	351250.00	4.2362500D+08	2.0349656	5.25355336D+11	6.2581455	33

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 3 (S'-FEX)

LOWER	LOG LIMITS	UPPER	OBS FREQ	CUM FREQ	PERCENT	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N			0	0	0.00	0.00		
L			0	0	0.00	0.00		
-2.500E+01	-8.333E+02	0	0	0	0.00	0.00	0.54	0.54
-8.333E+02	0	8.333E+02	2	2	2.53	2.53	0.67	0.07
8.333E+02	2.500E+01	4.167E+01	6	8	7.59	10.13	4.67	0.38
4.167E+01	5.833E+01	1.167E+01	11	26	13.92	32.91	15.06	1.10
5.833E+01	7.500E+01	1.750E+01	26	52	32.91	65.82	17.25	4.44
7.500E+01	9.167E+01	2.333E+01	14	66	17.72	83.54	14.64	0.03
9.167E+01	1.083E+00	3	76	3.80	96.20	92.41	9.20	0.53
1.083E+00	1.250E+00	3	79	3.80	100.00	92.41	4.29	0.39
G			0	79	0.00	100.00	1.94	0.58
H			0	79	0.00	100.00	0.54	0.54
B			6	85				
TOTALS LESS H AND B				79				

HISTOGRAM FOR VARIABLE 3 (S'-FEX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
MINIMUM ANTILOG	7.00000E-01	2.098799E-01
MAXIMUM ANTILOG	1.50000E+01	3.9999991E+00
GEOMETRIC MEAN	3.10464E+00	2.1583333E+00
GEOMETRIC DEVIATION	1.99776E+00	1.098799E+00
VARIANCE OF LOGS	9.03263E-02	2.5000000E-01

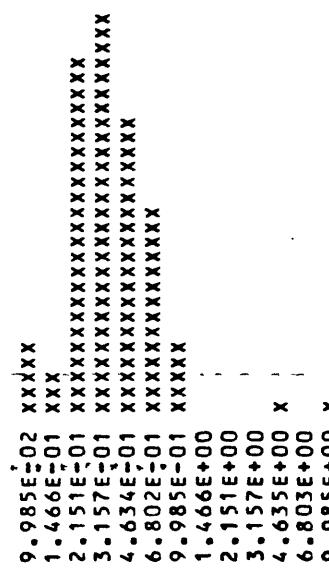
50.00	5.032066E+01
75.00	6.696447E-01
90.00	8.714308E-01
95.00	1.030558E+00
98.00	1.000000E+35
99.00	1.000000E+35

	3.185713E+00
	4.673526E+00
	7.437566E+00
	1.072897E+01
	1.000000E+35
	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 4 (S-MGX)

LOG LOWER LIMIT	LOG UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
-1.084E+00	-9.173E-01	1	1	0.00	0.00	1.91	1.91
-9.173E-01	-7.507E-01	4	4	5.06	5.06	3.75	0.02
-7.507E-01	-5.840E-01	2	6	2.53	7.59	7.79	4.31
-5.840E-01	-4.173E-01	19	25	24.05	31.65	12.54	3.32
-4.173E-01	-2.507E-01	21	46	26.58	58.23	15.64	1.83
-2.507E-01	-1.600E-01	16	62	20.25	78.48	15.12	0.05
-1.600E-01	-8.400E-02	11	73	13.92	92.41	11.32	0.01
-8.400E-02	-8.267E-02	4	77	5.06	97.47	6.57	1.01
-8.267E-02	-2.493E-01	0	77	0.00	97.47	2.96	2.96
-2.493E-01	4.160E-01	0	77	0.00	97.47	1.03	1.03
4.160E-01	5.822E-01	0	77	0.00	97.47	0.28	0.28
5.822E-01	7.493E-01	1	78	1.27	98.73	0.06	15.26
7.493E-01	9.160E-01	0	78	0.00	98.73	0.01	0.01
9.160E-01	1.083E+00	1	79	1.27	100.00	0.00	764.68
G		0	79	0.00	100.00		
H		0	79	0.00	100.00		
B		6	85				
TOTALS LESS H AND B							
			79				

HISTOGRAM FOR VARIABLE 4 (S-MGX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E-01
 MAXIMUM ANTILOG = 1.00000E+01
 GEOMETRIC MEAN = 3.63394E-01
 GEOMETRIC DEVIATION = 2.12090E+00
 VARIANCE OF LOGS = 1.06615E-01

PERCENT TABLE FOR VARIABLE 4 (S-MG%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-6.300517E-01	2.343950E-01
50.00	-4.689194E-01	3.396883E-01
75.00	-2.793109E-01	5.256408E-01
90.00	-1.127859E-01	7.712835E-01
95.00	1.418826E-03	1.003272E+00
98.00	3.626695E-01	2.304993E+00
99.00	1.000000E+35	1.000000E+35

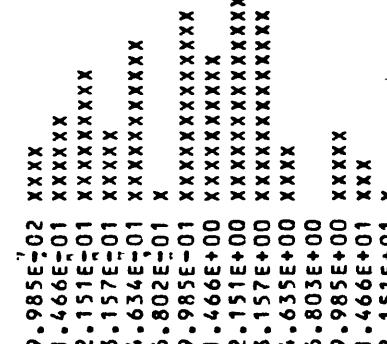
Table 3C-Concentrate Analysis.

FREQUENCY TABLE FOR VARIABLE S (S-CAX)

LOG LOWER LIMIT	LOG UPPER LIMIT	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
-1.084E+00	-9.173E-01	0	0	0.00	0.00		
-9.173E-01	-7.507E-01	3	3	1.27	1.27	2.27	2.27
-7.507E-01	-5.840E-01	5	8	3.80	5.06	0.56	0.56
-5.840E-01	-4.173E-01	7	16	6.33	11.39	1.16	1.16
-4.173E-01	-2.507E-01	4	20	5.06	20.25	4.53	1.35
-2.507E-01	-8.400E-02	9	29	11.39	36.71	7.54	0.28
-8.400E-02	8.267E-02	1	30	1.27	37.97	8.60	6.71
8.267E-02	2.493E-01	10	40	12.66	50.63	9.03	0.10
2.493E-01	4.160E-01	8	48	10.13	60.76	8.74	0.06
4.160E-01	5.827E-01	11	59	13.92	74.68	7.79	1.32
5.827E-01	7.493E-01	10	69	12.66	87.34	6.40	2.03
7.493E-01	9.160E-01	3	72	3.80	91.14	4.84	0.70
9.160E-01	1.083E+00	0	72	0.00	91.14	3.37	3.37
1.083E+00	1.249E+00	4	76	5.06	96.20	2.16	1.56
1.249E+00	1.416E+00	2	78	2.53	98.73	1.28	0.41
1.416E+00	1.616E+00	1	79	1.27	100.00	1.31	0.07
1.616E+00	6	0	79	0.00	100.00	0.00	0.00
6	H	0	79				
H	B	6	85				
TOTALS LESS H AND B		79					

TOTALS LESS H AND B

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HISTOGRAM FOR VARIABLE S (S-CAX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E-01
MAXIMUM ANTILOG	=	2.00000E+01
GEOMETRIC MEAN	=	1.06941E+00

GEOMETRIC DEVIATION = 3.72605E+00
VARIANCE OF LOGS = 3.26325E-01

PERCENT TABLE FOR VARIABLE S (S-CAX) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-4.277487E+01	3.734662E-01
50.00	7.433564E+02	1.186686E+00
75.00	4.201697E+01	2.631296E+00
90.00	6.993369E+01	5.004226E+00
95.00	1.003504E+00	1.008101E+01
98.00	1.201005E+00	1.588563E+01
99.00	1.0000000E+35	1.0000000E+35

Table 3c-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 6 (S-TIX)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)*2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
2.497E-02	2.497E-01	0	1	1.27	1.27	0.00	0.00
2.497E-01	4.163E-01	7	8	8.86	10.13	61.59	61.59
G		71	79	89.87	100.00	65.60	65.60
H		0	79			0.00	0.00
B		6	85				
TOTALS LESS H AND B			79				

HISTOGRAM FOR VARIABLE 6 (S-TIX)

- MIDPOINTS ARE EXPRESSED AS ANTILOGS

1.467E+00 X
2.153E+00 XXXXXXXX

66

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E+00
 MAXIMUM ANTILOG = 2.00000E+00
 GEOMETRIC MEAN = 1.92936E+00
 GEOMETRIC DEVIATION = 1.10706E+00
 VARIANCE OF LOGS = 1.95121E-03

PERCENT TABLE FOR VARIABLE 6 (S-TIX) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED
PERCENTILE

DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35
50.00	1.00000E+35
75.00	1.00000E+35
90.00	1.00000E+35
95.00	1.00000E+35
98.00	1.00000E+35
99.00	1.00000E+35

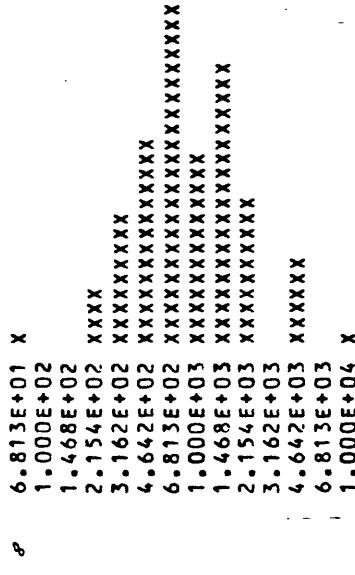
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.00000E+35
50.00	1.00000E+35	1.00000E+35
75.00	1.00000E+35	1.00000E+35
90.00	1.00000E+35	1.00000E+35
95.00	1.00000E+35	1.00000E+35
98.00	1.00000E+35	1.00000E+35
99.00	1.00000E+35	1.00000E+35

Table 3c-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST) (THEOR FREQ - OBS FREQ) * 2 / THEOR FREQ
N		0	0	0.00	0.00	
L		0	0	0.00	0.00	
1.750E+00	1.917E+00	1	1	0.00	0.00	0.04
1.917E+00	2.083E+00	0	1	1.27	1.27	0.15
2.083E+00	2.250E+00	0	1	0.00	1.27	0.52
2.250E+00	2.417E+00	3	4	3.80	5.06	3.48
2.417E+00	2.583E+00	7	11	8.86	13.92	6.66
2.583E+00	2.750E+00	11	22	13.92	27.85	10.43
2.750E+00	2.917E+00	18	40	22.78	50.63	13.37
2.917E+00	3.083E+00	10	50	12.66	63.29	14.02
3.083E+00	3.250E+00	15	65	18.99	82.28	12.03
3.250E+00	3.417E+00	8	73	10.13	92.41	8.44
3.417E+00	3.583E+00	0	73	0.00	92.41	4.85
3.583E+00	3.750E+00	5	78	6.33	98.73	2.28
3.750E+00	3.917E+00	0	78	0.00	98.73	0.88
3.917E+00	4.083E+00	1	79	1.27	100.00	0.37
G		0	79	0.00	100.00	0.04
H		0	79			
B		6	85			
TOTALS LESS H AND B		79				

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HISTOGRAM FOR VARIABLE 7 (S-MN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.00000E+01
 MAXIMUM ANTILOG = 1.00000E+04
 GEOMETRIC MEAN = 9.03885E+02
 GEOMETRIC DEVIATION = 2.33903E+00
 VARIANCE OF LOGS = 1.36187E-01

PERCENT TABLE FOR VARIABLE 7 (S-MN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.715911E+00	5.198895E+02
50.00	2.912039E+00	8.166564E+02
75.00	3.186114E+00	1.535020E+03
90.00	3.377087E+00	2.382794E+03
95.00	3.5553337E+00	3.575501E+03
98.00	3.711337E+00	5.144430E+03
99.00	1.0000000E+35	1.0000000E+35

Table 3c-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 9 (S-AS)

LOG LIMITS LOWER =	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		71	71	89.87	89.87		
L		0	71	0.00	89.87		
T		0	71	0.00	89.87		
2.750E+00	2.917E+00	1	72	1.27	91.14	36.90	36.90
2.917E+00	3.083E+00	0	72	0.00	91.14	20.52	18.57
3.083E+00	3.250E+00	3	75	3.80	94.94	13.78	13.78
3.250E+00	3.417E+00	1	76	1.27	96.20	5.89	1.42
3.417E+00	3.583E+00	0	76	0.00	96.20	1.60	0.23
3.583E+00	3.750E+00	0	76	0.00	96.20	0.28	0.28
3.750E+00	3.917E+00	3	79	3.80	100.00	0.03	0.03
G		0	79	0.00	100.00	4105.49	4105.49
H		0	79	0.00	100.00	0.00	0.00
B		6	85				
TOTALS LESS H AND B		79					

TOTALS LESS H AND B 79

HISTOGRAM FOR VARIABLE 9 (S-AS)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

6.813E+02 X
 1.000E+03 X
 1.468E+03 XXXX
 2.154E+03 X
 3.162E+03
 4.642E+03
 6.813E+03 XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG # 7.00000E+02
 MAXIMUM ANTILOG # 7.00000E+03
 GEOMETRIC MEAN # 2.51891E+03
 GEOMETRIC DEVIATION # 2.45237E+00
 VARIANCE OF LOGS # 1.51778E-01

10

PERCENT TABLE FOR VARIABLE 9 (S-AS) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.258334E+00	1.258334E+00

98.00
99.00

1.000000E+35
1.000000E+35
1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 11 (S⁻¹)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00		
1.250E+00	1.417E+00	5	6.33	6.33	0.68	0.68
1.417E+00	1.583E+00	8	10.13	16.46	1.24	1.24
1.583E+00	1.750E+00	18	22.78	39.24	3.05	3.05
1.750E+00	1.917E+00	24	30.38	69.62	0.25	0.25
1.917E+00	2.083E+00	15	70	18.99	0.01	0.01
2.083E+00	2.250E+00	8	78	10.13	0.22	0.22
2.250E+00	2.417E+00	1	79	1.27	0.06	0.06
G	0	0	0.00	0.00		
H	0	79	100.00	100.00		
B	6	85	0.68	0.68		
TOTALS LESS H AND B	79					

TOTALS LESS H AND B

HISTOGRAM FOR VARIABLE 11 (S⁻¹)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+01 XXXXXX
 3.162E+01 XXXXXXXXXX
 4.642E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 6.813E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 1.000E+02 XXXXXXXXXXXXXXXXXXXXXXXX
 1.468E+02 XXXXXXXXXXXXXXXX
 2.154E+02 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 2.00000E+02
 GEOMETRIC MEAN = 6.43882E+01
 GEOMETRIC DEVIATION = 1.71578E+00
 VARIANCE OF LOGS = 5.49722E-02

PERCENT TABLE FOR VARIABLE 11 (S⁻¹) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED
PERCENTILE
PERCENTILE
PERCENTILE

25.00	1.6645834E+00	4.424194E+01
50.00	1.809029E+00	6.442121E+01
75.00	1.963890E+00	9.202171E+01
90.00	2.106252E+00	1.277179E+02
95.00	2.188564E+00	1.543631E+02

98.00
99.00

2.237919E+00
1.000000E+35

1.729492E+02
1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS LOWER _ UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
1	0	0	0.00	0.00		
2.417E+00	2.417E+00	1	1.27	1.27	1.40	1.16
2.583E+00	2.583E+00	2	1.27	2.53	2.56	0.11
2.750E+00	2.750E+00	8	10.13	12.66	4.21	0.95
2.917E+00	2.917E+00	9	11.39	24.05	6.22	3.40
3.083E+00	3.083E+00	13	16.46	40.51	8.22	1.25
3.250E+00	3.250E+00	8	10.13	50.63	9.76	2.77
3.417E+00	3.417E+00	5	6.33	56.96	10.39	0.32
3.583E+00	3.583E+00	5	6.33	63.29	9.92	2.80
3.750E+00	3.750E+00	6	5.59	70.89	8.50	0.73
3.917E+00	3.917E+00	1	1.27	72.15	6.53	4.68
4.083E+00	4.083E+00	9	11.39	83.54	10.13	0.13
G	13	79	16.46	100.00	11.16	120.63
H	0	79				
B	6	85				
TOTALS LESS H AND B		79				

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HISTOGRAM FOR VARIABLE 12 (S-BA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+02	X
3.162E+02	X
4.642E+02	XXXXXX
6.813E+02	XXXXXXXXXX
1.000E+03	XXXXXXXXXXXX
1.468E+03	XXXXXXXXXX
2.154E+03	XXXXX
3.162E+03	XXXXX
4.642E+03	XXXXXX
6.813E+03	X
1.000E+04	XXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	2.00000E+02
MAXIMUM ANTILOG	=	1.00000E+04
GEOMETRIC MEAN	=	1.64771E+03
GEOMETRIC DEVIATION	=	2.80959E+00
VARIANCE OF LOGS	=	2.01281E-01

PERCENT TABLE FOR VARIABLE 12 (S-BA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999E 50

**SELECTED
PERCENTILE**

DATA VALUE ANTI LOG OF VALUE

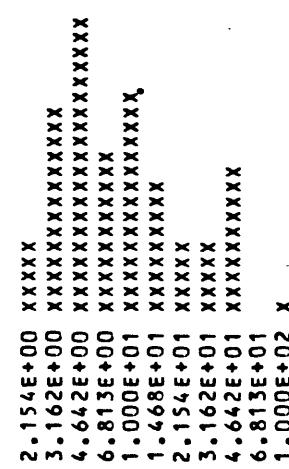
25.00	2.926283E+00	8.438852E+02
50.00	3.239585E+00	1.736142E+03
75.00	3.958337E+00	9.085247E+03
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 13 (S-BE)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	L	0	0	0.00	0.00		
L	T	3	3	3.80	3.80		
2.500E+01	4.167E+01	0	4	0.00	3.80	4.41	4.41
4.167E+01	5.833E+01	1	11	5.06	8.86	4.71	0.11
5.833E+01	7.500E+01	16	34	20.25	43.04	7.49	1.64
7.500E+01	9.167E+01	9	43	11.39	54.43	10.24	3.24
9.167E+01	1.083E+00	12	55	15.19	69.62	12.02	0.76
1.083E+00	1.250E+00	7	62	8.86	78.48	12.11	0.00
1.250E+00	1.417E+00	4	66	5.06	83.54	10.48	1.16
1.417E+00	1.583E+00	4	70	5.06	88.61	7.79	1.84
1.583E+00	1.750E+00	8	78	10.13	98.73	4.97	0.19
1.750E+00	1.917E+00	0	78	0.00	98.73	2.72	10.22
1.917E+00	2.083E+00	1	79	1.27	100.00	1.28	1.28
G	H	0	79	0.00	100.00	0.77	0.07
B		85				0.00	0.00
TOTALS LESS H AND B		79					

21 TOTALS LESS H AND B

HISTOGRAM FOR VARIABLE 13 (S-BE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	= 2.000000E+00
MAXIMUM ANTILOG	= 1.00000E+02
GEOMETRIC MEAN	= 8.90680E+00
GEOMETRIC DEVIATION	= 2.59219E+00
VARIANCE OF LOGS	= 1.71120E-01

PERCENT TABLE FOR VARIABLE 13 (S-BE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	6.015632E-01	3.995427E+00
50.00	8.518531E-01	7.109729E+00
75.00	1.184526E+00	1.529416E+01
90.00	1.606253E+00	4.038803E+01
95.00	1.688545E+00	4.881402E+01
98.00	1.737920E+00	5.469147E+01
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 14 (S-BI)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	50	50	50	63.29	63.29		
L	11	61	13.92	77.22			
T	0	61	0.00	77.22			
1.417E+00	1.417E+00	3	64	3.80	81.01	23.04	23.04
1.417E+00	1.583E+00	5	69	6.33	87.34	15.79	10.36
1.583E+00	1.750E+00	2	71	2.53	89.87	15.96	7.53
1.750E+00	1.917E+00	1	72	1.27	91.14	12.30	8.63
1.917E+00	2.083E+00	1	73	1.27	92.41	7.22	5.36
2.083E+00	2.250E+00	0	73	0.00	92.41	3.23	1.54
2.250E+00	2.417E+00	3	76	3.80	96.20	1.10	1.10
2.417E+00	2.583E+00	2	78	2.53	98.73	0.29	25.73
2.583E+00	2.750E+00	1	79	1.27	100.00	0.06	66.69
G	0	79	0.00	100.00		0.01	102.16
H	0	79				0.00	
B	6	85					
TOTALS LESS H AND B		79					

HISTOGRAM FOR VARIABLE 14 (S-BI)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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2.154E+01 XXXX
3.162E+01 XXXXXX
4.642E+01 XXX
6.813E+01 X
1.000E+02 X
1.468E+02 X
2.154E+02 XXXX
3.162E+02 XXX
4.642E+02 X

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 5.00000E+02
 GEOMETRIC MEAN = 6.89008E+01
 GEOMETRIC DEVIATION = 2.96280E+00
 VARIANCE OF LOGS = 2.22502E-01

PERCENT TABLE FOR VARIABLE 14 (S-BI) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
1.00000E+35	1.00000E+35	

50.00	1.000000E+35
75.00	1.000000E+35
90.00	1.000000E+35
95.00	5.843428E+01
98.00	2.046978E+02
99.00	3.427698E+02

Table 3c-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 16 (S-CO)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	8	8	10.13	10.13		
T	0	8	0.00	10.13		
9.160E+01	1.083E+00	57	72.15	82.28	8.85	8.85
1.083E+00	1.249E+00	2	2.53	84.81	7.45	7.45
1.249E+00	1.416E+00	12	79	15.19	23.69	23.69
G	0	79	0.00	100.00	30.00	30.00
H	0	79			0.00	0.00
B	6	85				
TOTALS LESS H AND B	79					

HISTOGRAM FOR VARIABLE 16 (S-CO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.000000E+01
MAXIMUM ANTILOG = 2.000000E+01
GEOMETRIC MEAN = 1.13720E+01
GEOMETRIC DEVIATION = 1.30360E+00
VARIANCE OF LOGS = 1.32582E-02

PERCENT TABLE FOR VARIABLE 16 (S-CO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 3c-Concentrate Analysis'

FREQUENCY TABLE FOR VARIABLE 17 (S-CR)

LOG LIMITS LOWER =	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00	0.00	
L		0	0	0.00	0.00	0.53	0.53
1.583E+00	1.750E+00	1.750E+00	4	4	0.00	0.00	0.78
1.750E+00	1.916E+00	1.916E+00	7	11	6.86	13.92	0.32
1.916E+00	2.083E+00	2.083E+00	18	29	22.78	36.71	8.65
2.083E+00	2.250E+00	2.250E+00	26	55	32.91	69.62	2.10
2.250E+00	2.416E+00	2.416E+00	12	67	15.19	84.81	1.41
2.416E+00	2.583E+00	2.583E+00	8	75	10.13	94.94	0.00
2.583E+00	2.750E+00	2.750E+00	4	79	5.06	100.00	2.68
G		0	79	0.00	100.00	0.53	0.53
H		0	79	0.00	100.00		
B		6	85				
TOTALS LESS H AND B		79					

HISTOGRAM FOR VARIABLE 17 (S-CR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+01 XXXXX
6.808E+01 XXXXXXXX
9.992E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.153E+02 XXXXXXXXXXXXXXXXX
3.160E+02 XXXXXXXXXX
4.638E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
MAXIMUM ANTILOG = 5.00000E+02
GEOMETRIC MEAN = 1.44019E+02
GEOMETRIC DEVIATION = 1.70809E+00
VARIANCE OF LOGS = 5.40615E-02

PERCENT TABLE FOR VARIABLE 17 (S-CR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999E 50

SELECTED PERCENTILE	#DATA VALUE	ANTI LOG OF VALUE
25.00	1.997353E+00	9.939229E+01
50.00	2.150309E+00	1.413542E+02
75.00	2.308696E+00	2.035616E+02
90.00	2.501752E+00	3.175059E+02
95.00	1.000000E+35	1.000000E+35

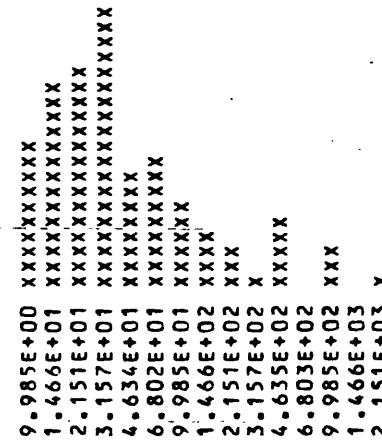
98.00
99.00

1.000000E+35
1.000000E+35
1.000000E+35

Table 3c-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 18 (S²-CU)

LOG LIMITS	LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	2	0	0	0	0.00	0.00	0.00	7.66	1.67
L	0	2	2	2	2.53	2.53	2.53	5.09	2.44
T	0	8	10	10	0.00	0.00	0.00	8.50	1.45
9.160E-01	1.083E+00	1.249E+00	11	21	12.66	12.66	12.66	9.52	3.16
1.083E+00	1.249E+00	1.583E+00	12	33	15.19	41.77	68.35	9.69	1.40
1.249E+00	1.583E+00	1.749E+00	15	48	18.99	60.76	88.73	8.97	0.43
1.583E+00	1.749E+00	1.916E+00	6	54	7.59	68.35	98.97	8.97	0.86
1.749E+00	1.916E+00	2.083E+00	7	61	8.86	77.22	96.20	7.55	1.33
1.916E+00	2.083E+00	2.249E+00	5	66	6.35	83.54	96.20	5.77	1.01
2.083E+00	2.249E+00	2.416E+00	3	69	3.80	87.34	98.73	4.01	0.93
2.249E+00	2.416E+00	2.583E+00	2	71	2.53	89.87	98.73	2.54	4.44
2.416E+00	2.583E+00	2.749E+00	1	72	1.27	91.14	98.73	0.76	0.76
2.583E+00	2.749E+00	2.916E+00	4	76	5.06	96.20	96.20	0.36	7.44
2.749E+00	2.916E+00	3.083E+00	0	76	0.00	96.20	98.73	0.16	0.16
2.916E+00	3.083E+00	3.249E+00	2	78	2.53	98.73	98.73	0.09	8.88
3.083E+00	3.249E+00	3.416E+00	0	78	0.00	98.73	100.00	0.00	0.00
3.249E+00	3.416E+00	6	79	1.27	100.00	100.00	100.00		
H	0	79	0	79	0.00	0.00	0.00		
B	1	6	85	85	0.00	0.00	0.00		
TOTALS LESS H AND B				79					

HISTOGRAM FOR VARIABLE 18 (S²-CU)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANILOG	= 1.00000E+01
MAXIMUM ANILOG	= 2.00000E+03
GEOMETRIC MEAN	= 4.26708E+01

GEOMETRIC DEVIATION = 3.42810E+00
VARIANCE OF LOGS = 2.86282E-01

PERCENT TABLE FOR VARIABLE 18 (S-CU) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.230395E+00	1.699787E+01
50.00	1.488223E+00	3.077679E+01
75.00	1.874335E+00	7.487473E+01
90.00	2.432670E+00	2.708131E+02
95.00	2.709754E+00	5.125705E+02
98.00	2.986004E+00	9.682870E+02
99.00	1.000000E+35	1.000000E+35

Table 3c-Concentrate Analysis

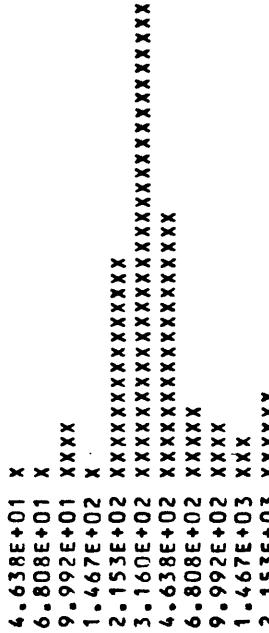
FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	L	3	3	3.80	3.80		
L	L	4	7	5.06	8.86		
1.583E+00	1.750E+00	0	7	0.00	8.86	1.08	1.08
1.750E+00	1.916E+00	1	8	1.27	10.13	1.72	0.30
1.916E+00	2.083E+00	1	9	1.27	11.39	3.52	1.81
2.083E+00	2.250E+00	3	12	3.80	15.19	6.14	1.61
2.250E+00	2.416E+00	1	13	1.27	16.46	9.14	7.25
2.416E+00	2.583E+00	12	25	15.19	31.65	11.60	0.01
2.583E+00	2.750E+00	25	50	31.65	63.29	12.57	12.31
2.750E+00	2.916E+00	14	64	17.72	81.01	11.61	0.49
2.916E+00	3.083E+00	4	68	5.06	86.08	9.14	2.89
3.083E+00	3.250E+00	3	71	3.80	89.87	6.15	1.61
3.250E+00	3.416E+00	2	73	2.53	92.41	3.52	0.66
		5	78	6.33	98.73	2.80	1.73
			79	1.27	100.00	0.00	0.00
TOTALS LESS H AND B		6	79				
H		0	79				
B		6	85				

TOTALS LESS H AND B 79

HISTOGRAM FOR VARIABLE 19 (S-LA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+01
MAXIMUM ANTILOG	=	2.00000E+03
GEOMETRIC MEAN	=	3.69299E+02
GEOMETRIC DEVIATION	=	2.17742E+00
VARIANCE OF LOGS	=	1.44205E-01

PERCENT TABLE FOR VARIABLE 19 (S-LA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS: 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.343418E+00	2.205049E+02
50.00	2.513002E+00	3.258381E+02
75.00	2.693121E+00	4.933116E+02
90.00	3.091336E+00	1.234060E+03
95.00	3.318003E+00	2.079713E+03
98.00	3.397004E+00	2.494616E+03
99.00	1.000000E+35	1.000000E+35

Table 3c-Concentrate Analysis.

FREQUENCY TABLE FOR VARIABLE 20 (S-MO)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	35	35	44.30	44.30	44.30		
L	6	41	7.59	51.90	51.90		
T	0	41	0.00	51.90	51.90		
9.160E-01	1.083E+00	1.6	57	20.25	72.15	16.76	16.76
1.083E+00	1.249E+00	6	63	7.59	79.75	17.60	0.15
1.249E+00	1.416E+00	5	68	6.33	86.08	19.46	9.31
1.416E+00	1.583E+00	7	75	8.86	94.94	14.57	6.28
1.583E+00	1.749E+00	1	76	1.27	96.20	7.38	0.02
1.749E+00	1.916E+00	1	77	1.27	97.47	2.53	0.93
1.916E+00	2.083E+00	1	78	1.27	98.73	0.59	0.29
2.083E+00	2.249E+00	0	78	0.00	98.73	0.09	6.96
2.249E+00	2.416E+00	0	78	0.00	98.73	0.00	0.00
2.416E+00	2.583E+00	1	79	1.27	100.00	0.01	0.00
G	0	79	0.00	100.00			
H	0	79					
B	6	85					
TOTALS LESS H AND B 79							

TOTALS LESS H AND B 79

HISTOGRAM FOR VARIABLE 20 (S-MO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXX
2.151E+01 XXXXXX
3.157E+01 XXXXXXXX
4.634E+01 X
6.802E+01 X
9.985E+01 X
1.466E+02 X
2.151E+02 X
3.157E+02 X

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 3.00000E+02
 GEOMETRIC MEAN = 1.82442E+01
 GEOMETRIC DEVIATION = 2.13734E+00
 VARIANCE OF LOGS = 1.08817E-01

PERCENT TABLE FOR VARIABLE 20 (S-MO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
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25.00	1.000000E+35
50.00	1.000000E+35
75.00	1.000000E+35
90.00	1.145167E+00
95.00	1.489811E+00
98.00	1.591001E+00
99.00	1.986002E+00
	1.000000E+35

1.000000E+35	1.000000E+35
1.000000E+35	1.000000E+35
1.000000E+35	1.396906E+01
3.088949E+01	3.088949E+01
3.899433E+01	3.899433E+01
9.682826E+01	9.682826E+01
1.000000E+35	1.000000E+35

Table 3c-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 21 (S-NB)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)^2/THEOR FREQ
N	L	0	0	0.00	0.00		
L	T	0	0	0.00	0.00	1.56	1.56
1.750E+00	1.917E+00	4	4	5.06	5.06	2.98	0.35
1.917E+00	2.083E+00	8	12	10.13	15.19	6.29	0.46
2.083E+00	2.250E+00	11	23	13.92	29.11	10.57	0.02
2.250E+00	2.417E+00	12	35	15.19	44.30	0.32	
2.417E+00	2.583E+00	14	49	17.72	62.03	0.07	
2.583E+00	2.750E+00	15	64	18.99	81.01	12.66	0.43
2.750E+00	2.917E+00	10	74	12.66	93.67	8.50	0.26
2.917E+00	3.083E+00	1	75	1.27	94.94	4.54	2.76
3.083E+00	3.250E+00	3	78	3.80	98.73	1.93	0.60
3.250E+00	3.417E+00	1	79	1.27	100.00	0.87	0.02
H	H	0	79	0.00	100.00	1.56	1.56
B	B	6	85				
TOTALS LESS H AND B		79					

TOTALS LESS H AND B

HISTOGRAM FOR VARIABLE 21 (S-NB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

6.813E+01 XXXXX
 1.000E+02 XXXXXXXXXXXXXXX
 1.468E+02 XXXXXXXXXXXXXXX
 2.154E+02 XXXXXXXXXXXXXXX
 3.162E+02 XXXXXXXXXXXXXXX
 4.642E+02 XXXXXXXXXXXXXXX
 6.813E+02 XXXXXXXXXXXXXXX
 1.000E+03 X
 1.468E+03 XXX
 2.154E+03 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.00000E+01
 MAXIMUM ANTILOG = 2.00000E+03
 GEOMETRIC MEAN = 2.88692E+02
 GEOMETRIC DEVIATION = 2.21235E+00
 VARIANCE OF LOGS = 1.18924E-01

PERCENT TABLE FOR VARIABLE 21 (S-NB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED DATA VALUE ANTI LOG OF VALUE
 PERCENTILE

25.00	2.200758E+00
50.00	1.587664E+02
75.00	2.470240E+00
90.00	2.952838E+02
95.00	2.697224E+00
98.00	4.979940E+02
99.00	2.868336E+00
	3.086114E+00
	3.217781E+00
	1.000000E+35

Table 3c-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	1	1	1.27	1.27		
L	8	9	10.13	11.39		
T	0	9	0.00	11.39		
9.160E-01	1.083E+00	20	25.32	36.71	5.74	5.74
1.083E+00	1.249E+00	6	35	44.30	3.90	3.90
1.249E+00	1.416E+00	24	59	74.68	11.10	11.10
1.416E+00	1.583E+00	15	72	91.14	0.38	0.38
1.583E+00	1.749E+00	7	79	8.86	0.03	0.03
G	0	79	0.00	100.00	0.50	0.50
H	0	79			0.00	0.00
B	6	85				
TOTALS LESS H AND B	79					

90

HISTOGRAM FOR VARIABLE 22 (S-NI)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 5.00000E+01
 GEOMETRIC MEAN = 1.89151E+01
 GEOMETRIC DEVIATION = 1.66423E+00
 VARIANCE OF LOGS = 4.89558E-02

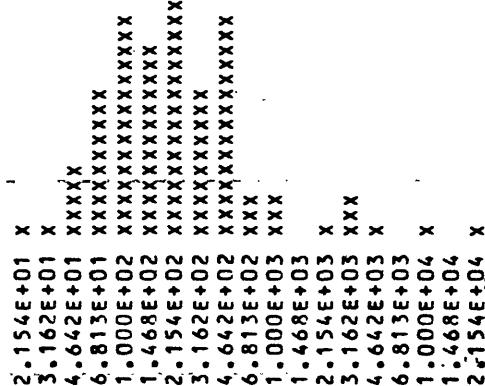
PERCENT TABLE FOR VARIABLE 22 (S-NI) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.280584E+00	1.908025E+01
75.00	1.419206E+00	2.625464E+01
90.00	1.571130E+00	3.725028E+01
95.00	1.600000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

FREQUENCY TABLE FOR VARIABLE 23 (S'-PB)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	L	0	0	0.00	0.00	0.00	
1.250E+00	1.417E+00	0	0	0.00	0.00	1.49	1.49
1.417E+00	1.583E+00	1	1	1.27	1.27	1.57	0.21
1.583E+00	1.750E+00	4	2	1.27	2.53	2.72	1.09
1.750E+00	1.917E+00	6	14	5.06	7.59	4.27	0.02
1.917E+00	2.083E+00	8	12	10.13	17.72	6.09	0.60
2.083E+00	2.250E+00	10	26	15.19	32.91	7.87	2.17
2.250E+00	2.417E+00	10	36	12.66	45.57	9.22	0.07
2.417E+00	2.583E+00	13	49	16.46	62.03	9.82	1.03
2.583E+00	2.750E+00	8	57	10.13	72.15	9.48	0.23
2.750E+00	2.917E+00	12	69	15.19	87.34	8.30	1.65
2.917E+00	3.083E+00	2	71	2.53	89.87	6.60	3.21
3.083E+00	3.250E+00	2	73	2.53	92.41	4.76	1.60
3.250E+00	3.417E+00	0	73	0.00	92.41	3.12	
3.417E+00	3.583E+00	1	74	1.27	93.67	1.85	
3.583E+00	3.750E+00	2	76	2.53	96.20	1.00	1.01
3.750E+00	3.917E+00	0	77	1.27	97.47	0.49	0.54
3.917E+00	4.083E+00	1	78	0.00	97.47	0.22	0.22
4.083E+00	4.250E+00	0	78	1.27	98.73	0.09	9.56
4.250E+00	4.417E+00	1	79	1.27	100.00	0.03	0.03
G	H	0	79	0.00	100.00	0.01	0.01
J2	B	0	79	0.00	100.00	1.49	1.49
TOTALS LESS H AND B		6	85				

Table 3C-Concentrate Analysis

HISTOGRAM FOR VARIABLE 23 (S'-PB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

TOTALS LESS H AND B 79

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 2.00000E+04
GEOMETRIC MEAN = 2.27220E+02
GEOMETRIC DEVIATION = 3.40799E+00
VARIANCE OF LOGS = 2.83554E-01

PERCENT TABLE FOR VARIABLE 23 (S-PB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.996529E+00	9.920402E+01
50.00	2.294874E+00	1.971850E+02
75.00	2.614586E+00	4.117049E+02
90.00	2.925003E+00	8.414016E+02
95.00	3.504171E+00	3.192796E+03
98.00	3.890005E+00	7.762565E+03
99.00	1.000000E+35	1.000000E+35

Table 3c-Concentrate Analysis.

FREQUENCY TABLE FOR VARIABLE 24 (S-SB)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	53	53	53	67.09	67.09		
L	10	63	12.66	79.75			
2.250E+00	2.417E+00	0	63	0.00	79.75	15.21	
2.417E+00	2.583E+00	9	72	11.39	91.14	52.82	
2.583E+00	2.750E+00	5	77	6.33	97.47	10.88	
2.750E+00	2.917E+00	1	78	1.27	98.73	0.00	
2.917E+00	6	1	79	1.27	100.00	0.09	
H	0	79	0	0.00	100.00	0.00	
B	6	85					
TOTALS LESS H AND B		79					

TOTALS LESS H AND B 79

HISTOGRAM FOR VARIABLE 24 (S-SB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+02 XXXXXXXXXX
 3.162E+02 XXXXXX
 4.642E+02 X
 6.813E+02 X

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 7.00000E+02
 GEOMETRIC MEAN = 2.59976E+02
 GEOMETRIC DEVIATION = 1.455771E+00
 VARIANCE OF LOGS = 2.67878E-02

PERCENT TABLE FOR VARIABLE 24 (S-SB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	2.518334E+00	3.298632E+02
98.00	2.653334E+00	4.501260E+02
99.00	1.200000E+35	1.000000E+35

Table 3c-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 25 (S-SC)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
1.083E+00	1.250E+00	0	0	0.00	0.00	0.29	0.29
1.250E+00	1.416E+00	1	1	1.27	1.27	1.10	0.01
1.416E+00	1.583E+00	4	5	5.06	6.33	3.63	0.04
1.583E+00	1.750E+00	13	29	16.46	36.71	6.58	0.68
1.750E+00	1.916E+00	13	42	16.46	53.16	16.63	0.18
1.916E+00	2.083E+00	21	63	26.58	79.75	17.98	1.38
2.083E+00	2.250E+00	8	71	10.13	89.87	10.17	1.61
2.250E+00	2.416E+00	8	79	10.13	100.00	6.68	0.46
G		0	79	0.00	100.00	0.29	0.29
H		0	79				
B		6	85				
TOTALS LESS H AND B			79				

94 HISTOGRAM FOR VARIABLE 25 (S-SC)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

1.467E+01 X
2.153E+01 XXXXX
3.160E+01 XXXXXXXX
4.638E+01 XXXXXXXXXXXX
6.808E+01 XXXXXXXXXXXX
9.992E+01 XXXXXXXXXXXXXXXXXX
1.467E+02 XXXXXXXX
2.153E+02 XXXXXXXX

T

79

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E+01
 MAXIMUM ANTILOG = 2.00000E+02
 GEOMETRIC MEAN = 7.15589E+01
 GEOMETRIC DEVIATION = 1.93741E+00
 VARIANCE OF LOGS = 8.24966E-02

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.631078E+00	4.276397E+01
50.00	1.884284E+00	7.660968E+01
75.00	2.053240E+00	1.130421E+02

PERCENT TABLE FOR VARIABLE 25 (S-SC) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

90.00
95.00
98.00
99.00

1.000000E+35
1.000000E+35
1.000000E+35
1.000000E+35
1.000000E+35

Table 3C-Concentrate Analysis.

FREQUENCY TABLE FOR VARIABLE 26 (S-SN)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		6	6	7.59	7.59		
L		3	9	3.80	11.39		
T		0	9	0.00	11.39	7.65	7.65
1.250E+00	1.417E+00	7	16	8.86	20.25	4.61	1.23
1.417E+00	1.583E+00	8	24	10.13	30.38	6.15	0.56
1.583E+00	1.750E+00	9	33	11.39	41.77	7.56	0.27
1.750E+00	1.917E+00	6	39	7.59	49.37	8.57	0.77
1.917E+00	2.083E+00	6	45	7.59	56.96	8.97	0.98
2.083E+00	2.250E+00	7	52	8.86	65.82	8.65	0.31
2.250E+00	2.417E+00	6	56	5.06	70.89	7.69	1.77
2.417E+00	2.583E+00	9	65	11.39	82.28	6.31	1.15
2.583E+00	2.750E+00	7	72	8.86	91.14	4.77	1.04
2.750E+00	2.917E+00	2	74	2.53	93.67	3.33	0.53
2.917E+00	3.083E+00	0	74	0.00	93.67	2.14	2.14
3.083E+00	3.250E+00	1	75	1.27	94.94	1.27	0.06
3.250E+00	3.417E+00	2	77	2.53	97.47	1.32	0.35
G		2	79	2.53	100.00	0.00	
H		0	79				
B		6	85				
TOTALS LESS H AND B		79					

90

HISTOGRAM FOR VARIABLE 26 (S-SN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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2.154E+01 XXXXXXXXXX
3.162E+01 XXXXXXXXXXXX
4.642E+01 XXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXX
1.000E+02 XXXXXXXXXX
1.468E+02 XXXXXXXXXX
2.154E+02 XXXXXX
3.162E+02 XXXXXXXXXXXX
4.642E+02 XXXXXXXXXX
6.813E+02 XXX
1.000E+03
1.468E+03 X
2.154E+03 XXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

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MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 2.00000E+03
GEOMETRIC MEAN = 1.15978E+02
GEOMETRIC DEVIATION = 3.35658E+00
VARIANCE OF LOGS = 2.76568E-01

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PERCENT TABLE FOR VARIABLE 26 (S-SN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.494792E+00	3.124584E+01
50.00	1.930557E+00	8.522302E+01
75.00	2.476854E+00	2.998156E+02
90.00	2.728574E+00	5.352718E+02
95.00	3.254171E+00	1.795439E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 3c-Concentrate Analysis.

FREQUENCY TABLE FOR VARIABLE 27 (S-SR)

LOG LIMITS	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		28	28	35.44	35.44		
L		9	37	11.39	46.84	14.99	14.99
2.250E+00	2.417E+00	0	37	0.00	46.84	1.43	1.43
2.417E+00	2.583E+00	10	47	12.66	59.49	14.57	10.27
2.583E+00	2.750E+00	4	51	5.06	64.56	17.35	0.00
2.750E+00	2.917E+00	15	66	18.99	83.54	15.25	
2.917E+00	3.083E+00	3	69	3.80	87.34	9.89	4.80
3.083E+00	3.250E+00	2	71	2.53	89.87	4.74	1.58
		8	79	10.13	100.00	2.21	15.16
H		0	79	0.00	100.00	0.00	0.00
B		6	85				
TOTALS LESS H AND B		79					

HISTOGRAM FOR VARIABLE 27 (S-SR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+02 XXXXXXXX
3.162E+02 XXXXX
4.642E+02 XXXXXX
6.813E+02 XXX
1.000E+03 XXX
1.4668E+03 XXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
MAXIMUM ANTILOG = 1.50000E+03
GEOMETRIC MEAN = 4.99743E+02
GEOMETRIC DEVIATION = 2.02447E+00
VARIANCE OF LOGS = 9.38263E-02

PERCENT TABLE FOR VARIABLE 27 (S-SR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

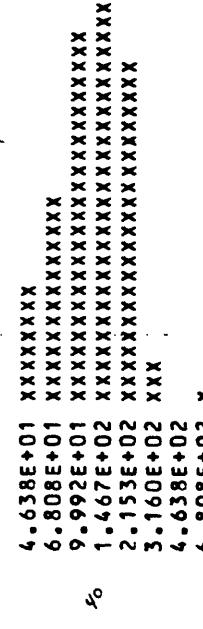
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.000000E+35
50.00	1.00000E+35	1.000000E+35
75.00	2.675001E+00	4.731522E+02
90.00	1.00000E+35	1.000000E+35
95.00	1.00000E+35	1.000000E+35
98.00	1.00000E+35	1.000000E+35
99.00	1.000000E+35	1.0000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
1.583E+00	1.750E+00	6	7.59	7.59	0.67	0.67
1.750E+00	1.916E+00	11	13.92	21.52	3.58	1.64
1.916E+00	2.083E+00	20	25.32	46.84	21.85	0.06
2.083E+00	2.250E+00	21	58	73.42	22.68	0.16
2.250E+00	2.416E+00	18	76	96.20	13.21	0.12
2.416E+00	2.583E+00	2	78	98.73	4.31	1.74
2.583E+00	2.750E+00	0	78	98.73	0.79	1.24
2.750E+00	2.916E+00	1	79	100.00	0.09	0.79
G	0	79	0.00	100.00	0.67	9.83
H	0	79				0.67
B	6	85				
TOTALS LESS H AND B		79				

TOTALS LESS H AND B

HISTOGRAM FOR VARIABLE 28 (S-V)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+01
MAXIMUM ANTILOG	=	7.00000E+02
GEOMETRIC MEAN	=	1.24092E+02
GEOMETRIC DEVIATION	=	1.63604E+00
VARIANCE OF LOGS	=	4.57074E-02

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.93925E+00	8.694622E+01
50.00	2.102842E+00	1.267192E+02
75.00	2.261242E+00	1.824913E+02

PERCENT TABLE FOR VARIABLE 28 (S-V) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

90.00
95.00
98.00
99.00

2.370965E+00
2.407539E+00
2.534669E+00
1.000000E+35

2.349441E+02
2.555870E+02
3.425063E+02
1.000000E+35

Table 3c-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 29 (S-W)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	52	52	65.82	65.82			
L	14	66	17.72	83.54			
T	0	66	0.00	83.54			
1.916E+00	2.083E+00	11	13.92	97.47			
2.083E+00	2.249E+00	1	1.27	98.73			
2.249E+00	2.416E+00	0	0.00	98.73			
2.416E+00	2.583E+00	0	0.00	98.73			
2.583E+00	2.749E+00	1	1.27	100.00			
G	0	79	0.00	100.00			
H	0	79					
B	6	85					
TOTALS LESS H AND B		79					

TOTALS LESS H AND B

HISTOGRAM FOR VARIABLE 29 (S-W)
 MIDPOINTS ARE EXPRESSED AS ANTILOGS

9.985E+01 XXXXXXXXXX
 1.466E+02 X
 2.151E+02
 3.157E+02
 4.634E+02 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
 MAXIMUM ANTILOG = 5.00000E+02
 GEOMETRIC MEAN = 1.16765E+02
 GEOMETRIC DEVIATION = 1.57011E+00
 VARIANCE OF LOGS = 3.83887E-02

PERCENT TABLE FOR VARIABLE 29 (S-W) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION.
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.99999991E 50

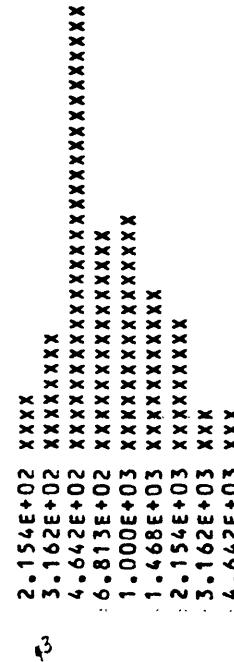
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.000000E+35
50.00	1.00000E+35	1.000000E+35
75.00	7.00000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	2.152667E+00	1.421239E+02
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis.

FREQUENCY TABLE FOR VARIABLE 30 (S-Y)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00		
2.250E+00	2.417E+00	3	3	3.80	3.80	0.02
2.417E+00	2.583E+00	6	9	7.59	11.39	0.25
2.583E+00	2.750E+00	24	35	30.38	41.77	1.46
2.750E+00	2.917E+00	12	45	15.19	56.96	10.55
2.917E+00	3.083E+00	13	58	16.46	73.42	1.06
3.083E+00	3.250E+00	9	67	11.39	84.81	0.50
3.250E+00	3.417E+00	7	74	8.86	93.67	0.65
3.417E+00	3.583E+00	2	76	2.53	96.20	0.02
3.583E+00	3.750E+00	2	78	2.53	98.73	0.25
G	1	79	1.27	100.00	1.20	0.53
H	0	79			1.46	0.15
B	6	85				
TOTALS LESS H AND B	79					

HISTOGRAM FOR VARIABLE 30 (S-Y)
MIDPOINTS ARE EXPRESSED AS ANTILOGS



THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 5.00000E+03
 GEOMETRIC MEAN = 7.83302E+02
 GEOMETRIC DEVIATION = 2.00589E+00
 VARIANCE OF LOGS = 9.13900E-02

PERCENT TABLE FOR VARIABLE 30 (S-Y) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.657987E+00	4.549744E+02

50.00	2.840279E+00
75.00	3.106483E+00
90.00	3.347621E+00
95.00	3.504169E+00
98.00	3.701670E+00
99.00	1.000000E+35

6.922755E+02
1.277860E+03
2.26493E+03
3.192781E+03
5.031176E+03
1.000000E+35

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DATE 1/14/83

Table 3c-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 33 (S-TH)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST) THEOR FREQ (THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	69	69	87.34	87.34		
L	2	71	2.53	89.87		
2.417E+00	2.583E+00	0	0.00	89.87	21.89	21.89
2.583E+00	2.750E+00	1	1.27	91.14	32.13	30.17
2.750E+00	2.917E+00	2	2.53	93.67	20.17	16.37
2.917E+00	3.083E+00	3	3.80	97.47	4.45	0.47
3.083E+00	3.250E+00	0	0.00	97.47	0.34	0.34
3.250E+00	3.417E+00	1	77	1.27	98.73	0.00
H	6	0	0.00	98.73	0.00	0.00
H	8	6	85	1.27	100.00	0.01
TOTALS LESS H AND B.		79		0.00	100.00	0.00
						0.00

HISTOGRAM FOR VARIABLE 33 (S-TH)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+02 X
 3.162E+02 XXX
 4.642E+02 XXXX
 6.813E+02
 1.000E+03 X
 1.468E+03
 2.154E+03 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 2.00000E+03
 GEOMETRIC MEAN = 5.0892E+02
 GEOMETRIC DEVIATION = 2.08136E+00
 VARIANCE OF LOGS = 1.01345E-01

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	2.6416667E+00	4.381950E+02

PERCENT TABLE FOR VARIABLE 33 (S-TH) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.99999991E 50

98.00
99.00

2.890001E+00
1.000000E+35

7.762494E+02
1.0000000E+35

Table 6A -- Geochemical Data for Rock Samples

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppt. s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
HG050R	34 12 24	111 7 28	1.5	.20	.05	.200	200	N	N	100	500	500
HG085R	34 13 16	111 8 34	.5	.05	<.05	.050	.50	N	N	50	70	70
HG086R	34 11 38	111 14 44	.5	.03	<.05	.015	1,500	N	N	30	300	300
HG086RA	34 11 38	111 14 44	1.0	.03	.05	.010	.50	N	N	20	70	70
HG087R	34 8 56	111 14 53	.2	.07	.05	.020	.70	N	N	30	100	100
HG089R	34 8 29	111 4 38	.5	.05	.05	.100	.50	5.0	N	100	200	200
HG089RA	34 8 28	111 4 40	.7	.03	N	.100	.50	1.5	N	30	700	700
HG089RB	34 8 26	111 4 44	.5	.03	.05	.150	.150	N	N	150	500	500
HG089RC	34 8 26	111 4 44	.5	.03	<.05	.050	.100	N	N	30	200	200
HG089RD	34 8 29	111 4 38	5.0	.07	.05	.100	.70	10.0	.500	20	2,000	300
HG090R	34 4 36	111 4 34	20.0	.05	.10	.150	.100	100.0	.5,000	20	2,000	200
HG090RA	34 4 36	111 4 34	3.0	.70	.05	.500	1,000	3.0	N	500	500	200
HG091R	34 3 18	111 12 16	5.0	7.00	20.00	.050	3,000	20.0	2,000	10	150	150
HG091RA	34 3 18	111 12 16	2.0	3.00	10.00	.050	2,000	150.0	>10,000	10	300	300
HG092R	34 5 11	111 10 49	3.0	.10	.10	.070	.150	30.0	.5,000	N	2,000	150
HG092RA	34 5 11	111 10 49	20.0	.50	.20	1.000	>5,000	10.0	2,000	N	>2,000	1,000
HG093R	34 5 38	111 6 22	3.0	3.00	7.00	.150	1,000	1.0	200	N	>2,000	300
HG093RA	34 5 38	111 6 22	3.0	2.00	5.00	.300	150	N	N	2,000	500	500
HG089RE	34 8 29	111 4 38	2.0	1.00	.10	.300	200	N	N	>2,000	300	300
20813	34 4 51	111 11 28	5.0	1.00	.10	.500	1,500	10.0	N	>2,000	100	100

Table 4A -- Geochemical Data for Rock Samples

Sample	Ba-ppm	Bi-ppm	Cd-ppm	Co-ppm	Cr-ppm	Cu-ppm	La-ppm	Mo-ppm	Nb-ppm	Ni-ppm	Pb-ppm	Sb-ppm	Sc-ppm
HG050R	5.0	N	N	<5	N	30	150	N	30	5	30	N	N
HG085R	1.5	N	N	N	N	<5	20	N	10	10	N	<5	N
HG086R	3.0	N	N	N	N	7	30	N	10	20	N	N	N
HG086RA	2.0	N	N	N	N	<5	30	N	7	<10	N	N	N
HG087R	2.0	N	N	N	N	7	20	N	10	10	N	N	N
HG089R	3.0	N	N	<5	10	20	20	15	N	15	<10	N	N
HG089RA	20.0	N	N	N	50	10	<20	N	10	15	N	<5	N
HG089RB	2.0	N	N	N	5	20	30	N	7	<10	N	<5	N
HG089RC	3.0	N	N	N	5	20	30	N	10	15	N	N	N
HG089RD	3.0	N	N	N	5	30	1,000	50	20	10	200	200	7
HG090R	50.0	20	N	N	100	>20,000	30	70	<20	70	500	2,000	10
HG090RA	5.0	N	N	N	20	100	500	100	N	<20	30	10	7
HG091R	1.0	<10	30	15	30	7,000	N	N	N	10	500	1,500	10
HG091RA	1.5	100	300	30	N	>20,000	N	20	N	7	1,000	10,000	<5
HG092R	1.0	200	30	20	50	20,000	20	20	N	50	<10	7,000	<5
HG092RA	2.0	N	N	N	50	5,000	7,000	100	100	<20	300	20	50
HG093R	100.0	N	N	30	700	200	<20	N	N	200	30	N	20
HG093RA	200.0	N	N	20	100	70	N	N	N	50	20	N	15
HG089RE	15.0	<10	N	10	70	500	30	5	N	50	30	N	10
20813	3.0	20	30	150	15,000	20	<20	N	70	70	15	N	20

Table 4A -- Geochemical Data for Rock Samples

Sample	Sn-ppm	Sr'-ppm	V"-ppm	W'-ppm	Y'-ppm	Zn'-ppm	Zr'-ppm	Th-ppm	Au-ppm	Hg-ppm	Tc-ppm	Cu-ppm	Pb-ppm
	s	s	s	s	s	s	s	s	aa	inst	aa	aa	aa
HD050R	15	N	20	N	100	200	500	N	N	.10	.2	.65	<5
HD085R	N	N	15	N	<10	N	70	N	N	.04	.2	<5	N
HD086R	N	N	20	N	15	N	20	N	N	.06	.2	10	10
HD086RA	N	N	15	N	30	N	15	N	N	.04	.2	<5	N
HD087R	N	N	10	N	10	N	70	N	N	<.02	.2	<5	N
HD089R	N	N	20	N	<10	N	200	N	N	.10	.04	.2	20
HD089RA	N	N	30	N	10	N	70	N	N	.30	.04	.7	25
HD089RB	N	N	50	N	10	N	200	N	N	.18	.2	10	N
HD089RC	N	N	30	N	15	N	70	N	N	.02	.2	20	<5
HD089RD	N	N	100	N	<50	10	<200	30	42.00	.18	3.2	1,200	30
HD090R	N	N	100	N	100	50	500	200	N	N	51.00	--	--
HD090RA	N	N	100	N	50	300	1,000	N	N	.15	.20	1.7	120
HD091R	N	N	500	N	20	500	30	N	N	.40	--	240	<5
HD091RA	N	N	200	N	30	N	>10,000	50	N	.40	--	10,000	140
HD092R	N	N	<100	N	10	1,500	50	N	N	.65	--	1.5	240
HD092RA	N	N	300	N	200	N	50	1,500	N	N	.10	1.2	5,200
HD093R	N	N	300	N	300	N	N	15	N	N	.04	.2	120
HD093RA	N	N	500	N	70	<50	N	15	N	N	.30	.2	45
HD089RE	N	N	1,000	N	100	N	20	N	N	.80	.24	.4	15
20813	N	N	150	N	150	N	30	N	N	4.80	--	6.9	<5

Table 4A -- Geochemical Data for Rock Samples

Sample	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	As-ppm cm	Hg-ppm aa
HG050R	30	N	N	N	2	N	
HG085R	15	.05	N	N	1	<10	
HG086R	15	<.05	<.05	N	2	20	
HG086RA	10	<.05	N	<1	8	N	
HG087R	15	N	N	N	2	<10	
HG089R	10	.75	N	N	1	N	
HG089RA	20	.35	<.05	N	15	N	
HG089RB	15	<.05	N	N	1	N	
HG089RC	15	<.05	N	N	1	N	
HG089RD	45	10.00	.15	N	100	80	
HG090R	15	75.00	1.50	10	1,400	800	660
HG090RA	100	1.00	.05	N	20	30	--
HG091R	640	11.00	10.50	1	1,100	70	
HG091RA	400	6.00	49.00	70	5,800	--	890
HG092R	600	9.50	5.50	70	3,500	800	33
HG092RA	200	2.50	3.50	2	1,700	400	6
HG093R	30	.25	.35	N	27	20	--
HG093RA	20	N	N	N	6	10	--
HG089RE	40	.75	<.05	N	16	10	
20813	25	3.00	.20	8	3	20	

Table 4B -- FISHER-K Statistics for Rock Samples

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	K4 SKWNESS	K4 KURTOSIS	NO
1	LATITUDE	36.125778	0.0507036	0.0025709	4.89811800-05	0.3757622	-5.92027200-06	1
2	LONGITUD	111.13993	0.0656935	0.0043156	1.396311790-04	0.4925112	-2.56535430-05	2
3	S-FEX	3.8350000	5.7570346	33.143447	675.50976	2.4920854	6053.0485	3
4	S-MGX	0.9470000	1.7148825	2.9408221	13.552631	2.6873269	69.565117	4
5	S-CAX	2.6843750	5.5305430	30.586906	416.28328	2.4608528	5865.0946	5
6	S-TIX	0.1932500	0.2391007	0.0571691	0.0322753	2.3611715	0.0207063	6
7	S-MN	599.47368	845.22498	714405.26	1.02821510+09	1.7028132	1.22178700+12	7
8	S-AG	28.416667	47.143318	2222.4924	224035.02	2.1382352	1.9084568.	8
9	S-AS	2450.0000	2110.6871	4455000.0	4.25250000+09	0.4522439	-3.67294500+13	9
10	S-AU	16.666667	5.7735027	33.333333	-1.333333	-1.2320508	-1.8506275	10
11	S-B	566.25000	862.90111	744598.33	7.81130040+08	1.2157387	-2.91792200+11	11
12	S-BA	307.00000	233.93881	54727.368	1.6355677	8.93166470+09	2.9821074	12
13	S-BE	21.150000	48.284273	2331.3711	358888.83	3.1881800	576533715.	13
14	S-BI	71.000000	80.343015	6455.0000	720900.00	1.3900507	42907625.	14
15	S-CO	95.000000	136.74794	18700.000	5096000.0	1.9928151	1.39006600+09	15
16	S-CO	26.153846	25.670496	658.97436	37594.843	2.2224167	25334447.3	16
17	S-CR	459.28571	1318.5625	1738607.1	8.33282640+09	3.6348805	4.04530110+13	17
18	S-CU	3215.2500	6105.4450	37276458.	4.67584630+11	2.0545100	4.82057930+15	18
19	S-LA	46.428571	40.498270	1640.1099	117032.97	1.7619712	6109016.0	19
20	S-MO	35.714286	35.169657	1236.9048	59842.857	1.3756499	939922.62	20
21	S-NB	30.00000	74.677887	5576.7868	1127776.3	2.7079891	2.29838070+08	21
22	S-NI	46.550000	280.15900	78489.063	50826137.	2.3113909	7.3901605	22
23	S-PB	151.56250	3831.6663	14681667.	6.12838330+10	1.0893887	3.20964940+10	23
24	S-SB	3783.3333	13.491767	182.02778	5608.3532	2.28336464	-7.81459830+13	24
25	S-SC	16.555556	15.000000	77361.111	36981.647.	3.1515996	-0.3625400	25
26	S-SS	361.1111	278.13865	1279432.	1.7187084	1.96137900+10	5.7245034	26
27	S-SR	100.50000	159.54623	25455.000	127238964.	7.19211850+09	3.2772994	27
28	S-V	100.00000	23.250905	540.60458	27035.335	2.1508602	1.521142.6	28
29	S-W	100.00000	592.45253	35100.00	1.66500000+08	0.8006700	-2.28810000+11	29
30	S-Y	26.388889	52192.829	52192.829	3.1230672	189676.34	5.2048772	30
31	S-ZN	750.00000	18.261638	333.48741	1.1584.279	1.9021723	-1.8572090	31
32	S-ZR	151.75000	0.0939469	0.0088256	6.57706300-04	0.7932546	10.630251	32
-	S-TH	113.00000	2.7534476	7.5816737	59.065558	2.8285039	-0.7725048	33
34	AA-AU-P	10.109091	15.811463	2971.24652	8828297.8	6.82295680+10	461.07553	34
35	INST-HG	0.1138462	1.4600000	89.489292	8008.3333	749350.00	5.11056600+14	35
36	AA-TE	1.4600000	1320.5846	196.36432	38558.947	1.0456143	3974208.3	36
37	AA-CU-P	23.428571	31.978415	406.61244	27553.236	3.3604824	485766.57	37
38	AA-PB-P	80.000000	1496.8455	250.00174	10845.027	2.7435703	-917158.30	38
39	AA-ZN-P	113.00000	184396.36	1022.6190	1.1864097	8.94892080+09	-0.8770342	39
40	AA-AG-P	9.2423077	184396.36	2240546.5	2.6683311	3.65264050+13	3.2761058	40
41	AA-CD-P	7.8611111	429.41398	96527206.	1.2190491,	4.04827050+09	0.1190597	41
42	AA-BI-P	15.811463	154891.87	66893739.	1.0973434	-2.42312050+10	-1.0099916	42
43	AA-SB-P	685.25000	393.56304	-	-	-	-	43
44	CN-AS	308.18182	-	-	-	-	-	44
45	AA-HG	276.66667	-	-	-	-	-	45

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 4B -- FISHER-K Statistics for Rock samples

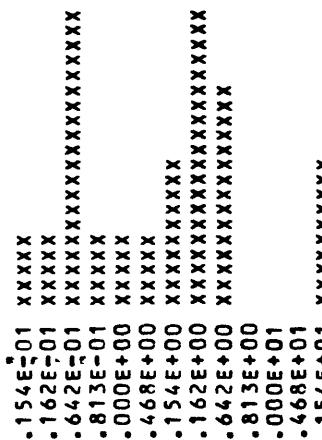
NO	MAXIMUM LATITUDE	MINIMUM LONGITUD	NO OF UNQUAL VALUES		NO OF IMPROPER QUAL VALUES	
			1	2	3	4
1	34.055000	34.022111	1	2	3	4
2	111.07611	111.24806	0	0	0	0
3	0.200000	0.030000	0	0	0	0
4	0.050000	0.010000	0	0	0	0
5	50.000000	50.000000	0	0	0	0
6	10.000000	10.000000	0	0	0	0
7	10.000000	10.000000	0	0	0	0
8	10.000000	10.000000	0	0	0	0
9	10.000000	10.000000	0	0	0	0
10	10.000000	10.000000	0	0	0	0
11	10.000000	10.000000	0	0	0	0
12	10.000000	10.000000	0	0	0	0
13	10.000000	10.000000	0	0	0	0
14	10.000000	10.000000	0	0	0	0
15	10.000000	10.000000	0	0	0	0
16	10.000000	10.000000	0	0	0	0
17	10.000000	10.000000	0	0	0	0
18	10.000000	10.000000	0	0	0	0
19	10.000000	10.000000	0	0	0	0
20	10.000000	10.000000	0	0	0	0
21	10.000000	10.000000	0	0	0	0
22	10.000000	10.000000	0	0	0	0
23	10.000000	10.000000	0	0	0	0
24	10.000000	10.000000	0	0	0	0
25	10.000000	10.000000	0	0	0	0
26	10.000000	10.000000	0	0	0	0
27	10.000000	10.000000	0	0	0	0
28	10.000000	10.000000	0	0	0	0
29	10.000000	10.000000	0	0	0	0
30	10.000000	10.000000	0	0	0	0
31	10.000000	10.000000	0	0	0	0
32	10.000000	10.000000	0	0	0	0
33	10.000000	10.000000	0	0	0	0
34	10.000000	10.000000	0	0	0	0
35	10.000000	10.000000	0	0	0	0
36	10.000000	10.000000	0	0	0	0
37	10.000000	10.000000	0	0	0	0
38	10.000000	10.000000	0	0	0	0
39	10.000000	10.000000	0	0	0	0
40	10.000000	10.000000	0	0	0	0
41	10.000000	10.000000	0	0	0	0
42	10.000000	10.000000	0	0	0	0
43	10.000000	10.000000	0	0	0	0
44	10.000000	10.000000	0	0	0	0
45	10.000000	10.000000	0	0	0	0

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 3 (S-FEX)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	1	5.00	5.00	0.77	0.77
7.500E-01 -5.833E-01	1	2	5.00	10.00	0.64	0.20
-4.167E-01 -2.500E-01	1	4	20.00	30.00	0.99	0.00
-2.500E-01 -8.333E-02	1	7	5.00	35.00	1.41	4.79
-8.333E-02 -8.333E-02	1	8	5.00	40.00	1.82	0.37
8.333E-02 2.500E-01	1	9	5.00	45.00	2.16	0.62
2.500E-01 4.167E-01	2	11	10.00	55.00	2.34	0.77
4.167E-01 5.833E-01	4	15	20.00	75.00	2.33	0.05
5.833E-01 7.500E-01	3	18	15.00	90.00	2.12	1.65
7.500E-01 9.167E-01	0	18	0.00	90.00	1.77	0.85
9.167E-01 1.083E+00	0	18	0.00	90.00	1.36	0.95
1.083E+00 1.250E+00	0	18	0.00	90.00	0.95	0.61
1.250E+00 1.417E+00	2	20	10.00	100.00	0.72	2.30
G	0	20	0.00	100.00	0.77	0.77
H	0	20				
B	0	20				
TOTALS LESS H AND B	20					

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HISTOGRAM FOR VARIABLE 3 (S-FEX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	= 2.00000E-01
MAXIMUM ANTILOG	= 2.00000E+01
GEOMETRIC MEAN	= 1.73875E+00
GEOMETRIC DEVIATION	= 3.63456E+00
VARIANCE OF LOGS	= 3.14106E-01

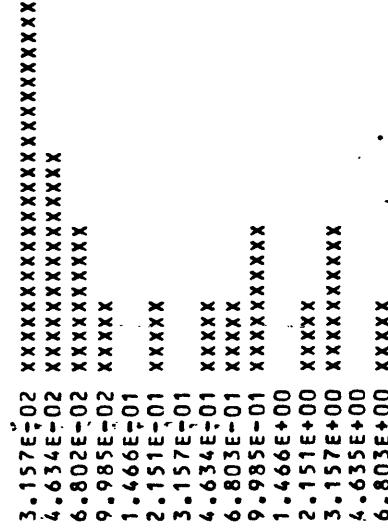
PERCENT TABLE FOR VARIABLE 3 (S-FEX) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-2.916658E-01	5.108981E-01
50.00	3.333355E-01	2.154445E+00
75.00	5.833360E-01	3.831210E+00
90.00	7.500030E-01	5.623452E+00
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4c-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 4 (S-MGX)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST)	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	L	0	0	0.00	0.00	0.00	0.00	
T	T	0	0	0.00	0.00	0.00	2.74	
-1.584E+00	-1.417E+00	5	5	25.00	25.00	1.00	2.74	
-1.417E+00	-1.251E+00	3	8	15.00	40.00	1.20	16.00	
-1.251E+00	-1.084E+00	2	10	10.00	50.00	1.38	2.71	
-1.084E+00	-9.173E+01	1	11	5.00	55.00	1.52	0.28	
-9.173E+01	-7.507E+01	0	11	0.00	55.00	1.61	0.18	
-7.507E+01	-5.840E+01	0	12	5.00	60.00	1.63	1.61	
-5.840E+01	-4.173E+01	0	12	0.00	60.00	1.59	0.24	
-4.173E+01	-2.507E+01	1	13	5.00	65.00	1.48	1.59	
-2.507E+01	-8.400E+02	1	14	5.00	70.00	1.32	0.16	
-8.400E+02	-8.267E+02	2	16	10.00	80.00	1.14	0.08	
-8.267E+02	-2.493E+01	0	16	0.00	80.00	0.93	0.08	
-2.493E+01	-4.160E+01	1	17	5.00	85.00	0.74	0.09	
-4.160E+01	-5.827E+01	2	19	10.00	95.00	0.56	3.72	
-5.827E+01	-7.493E+01	0	19	0.00	95.00	0.41	0.41	
-7.493E+01	9.160E+01	1	20	5.00	100.00	0.76	0.08	
G	0	0	20	0.00	100.00	2.74	2.74	
H	0	20						
B	0	20						
TOTALS LESS H AND B								
20								

1.14
TOTALSHISTOGRAM FOR VARIABLE 4 (S-MGX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	= 3.00000E-02
MAXIMUM ANTILOG	= 7.00000E+00
GEOMETRIC MEAN	= 2.02260E-01

GEOMETRIC DEVIATION = 6.50665E+00
VARIANCE OF LOGS = 6.61550E-01

PERCENT TABLE FOR VARIABLE 4 (S-MGZ) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999E 50.

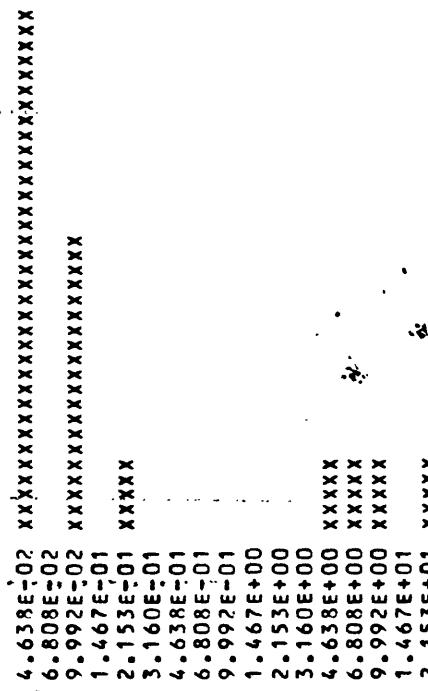
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.41733E+00	3.825313E-02
50.00	1.083999E+00	8.241400E-02
75.00	6.635115E-04	9.984734E-01
90.00	4.993375E-01	3.157457E+00
95.00	5.826710E-01	3.825348E+00
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE S (S-CAX)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	1	1	5.00	5.00		
L	3	4	15.00	20.00		
T	0	4	0.00	20.00	4.66	4.66
-1.417E+00	7	11	35.00	55.00		
-1.250E+00	0	11	0.00	55.00	1.20	28.01
-1.084E+00	4	15	20.00	75.00	1.33	1.33
-9.170E-01	7	15	0.00	75.00	1.42	4.70
-7.503E-01	0	15			1.46	
-5.837E-01	1	16	5.00	80.00	1.46	0.15
-4.170E-01	0	16	0.00	80.00	1.41	1.41
-2.503E-01	0	16	0.00	80.00	1.32	1.32
-8.366E-02	0	16	0.00	80.00	1.19	1.19
8.300E-02	8	24	0.00	80.00	1.03	1.03
2.497E-01	0	24	0.00	80.00	0.87	0.87
2.497E-01	0	24	0.00	80.00	0.71	0.71
4.163E-01	5	29	0.00	80.00	0.56	0.56
5.830E-01	7	36	0.00	85.00	0.43	0.78
7.497E-01	9	45	0.00	90.00	0.31	1.51
9.163E-01	1	46	5.00	95.00	0.22	2.72
1.083E+00	1	47	0.00	95.00	0.15	0.15
1.250E+00	1	48	5.00	100.00	0.26	2.07
G	0	48	0.00	100.00	0.00	
H	0	48				
B	0	48				
TOTALS LESS H AND B	20					

HISTOGRAM FOR VARIABLE S (S-CAX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS



MINIMUM ANTILOG = 5.00000E-02
 MAXIMUM ANTILOG = 2.00000E+01
 GEOMETRIC MEAN = 2.38469E-01
 GEOMETRIC DEVIATION = 9.27195E+00
 VARIANCE OF LOGS = 9.35420E-01

PERCENT TABLE FOR VARIABLE S (S-CAX) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

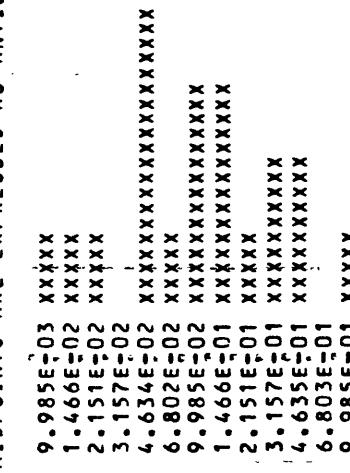
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	-9.169990E-01	1.210601E-01
90.00	9.163380E-01	8.247798E+00
95.00	1.083005E+00	1.210612E+01
96.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 6 (S-TIX)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	L	0	0	0.00	0.00	0.00	
-2.084E+00	-1.917E+00	1	1	0.00	0.00	0.35	0.35
-1.917E+00	-1.751E+00	1	2	5.00	5.00	0.39	0.97
-1.751E+00	-1.584E+00	1	3	5.00	10.00	0.68	0.15
-1.584E+00	-1.417E+00	0	3	0.00	15.00	1.09	0.01
-1.417E+00	-1.251E+00	4	7	20.00	35.00	1.56	1.56
-1.251E+00	-1.084E+00	1	8	5.00	40.00	2.03	1.90
-1.084E+00	-9.173E-01	3	11	15.00	55.00	2.39	0.81
-9.173E-01	-7.507E-01	3	14	15.00	70.00	2.54	0.08
-7.507E-01	-5.840E-01	1	15	5.00	75.00	2.11	0.13
-5.840E-01	-4.173E-01	2	17	10.00	85.00	0.59	0.59
-4.173E-01	-2.507E-01	2	19	10.00	95.00	1.66	0.07
-2.507E-01	-8.400E-02	0	19	0.00	95.00	1.17	0.75
-8.400E-02	-8.267E-02	1	20	5.00	100.00	0.84	0.03
G	H	0	20	0.00	100.00	0.35	0.35
B	H	0	20				
TOTALS LESS H AND B		20					

HISTOGRAM FOR VARIABLE 6 (S-TIX)
MIDPOINTS ARE EXPRESSED AS ANTILOGS



THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E-02
MAXIMUM ANTILOG	=	1.00000E+00
GEOMETRIC MEAN	=	1.03509E-01
GEOMETRIC DEVIATION	=	3.32205E+00
VARIANCE OF LOGS	=	2.71864E-01

PERCENT TABLE FOR VARIABLE 6 (S-TIX) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	21.417332E+00	3.825322E-02
50.00	19.728867E-01	1.064421E-01
75.00	15.839970E-01	2.606172E-01
90.00	13.339965E-01	4.634507E-01
95.00	12.506630E-01	5.614835E-01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
1	1.750E+00	1.750E+00	4	20.00	20.00	2.13	2.13
1	1.916E+00	1.916E+00	2	10.00	30.00	1.05	8.25
1	2.083E+00	2.083E+00	2	10.00	40.00	1.35	0.32
2	2.250E+00	2.250E+00	3	11	55.00	1.62	0.09
2	2.416E+00	2.416E+00	2	13	65.00	1.83	0.75
2	2.583E+00	2.583E+00	0	13	65.00	1.95	0.00
2	2.750E+00	2.750E+00	0	13	65.00	1.95	1.95
2	2.916E+00	2.916E+00	0	13	65.00	1.84	1.84
2	3.083E+00	3.083E+00	2	15	75.00	1.64	1.64
3	3.250E+00	3.250E+00	2	17	85.00	1.37	0.29
3	3.416E+00	3.416E+00	1	18	90.00	1.07	0.29
3	3.583E+00	3.583E+00	1	19	95.00	0.79	0.05
G		1	20	5.00	100.00	1.41	0.12
H		0	20			2.13	0.60
B		0	20				
TOTALS LESS H AND B			20				

TOTALS LESS H AND B

HISTOGRAM FOR VARIABLE 7 (S-MN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+01	XXXXXXXXXXXXXXXXXXXX
6.808E+01	XXXXXXXXXXXX
9.992E+01	XXXXXXXXXXXX
1.467E+02	XXXXXXXXXXXXXX
2.153E+02	XXXXXXXXXXXX
3.160E+02	XXXX
4.638E+02	
6.808E+02	
9.992E+02	
1.467E+03	
2.153E+03	
3.160E+03	

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+01
MAXIMUM ANTILOG	=	3.00000E+03
GEOMETRIC MEAN	=	2.26512E+02
GEOMETRIC DEVIATION	=	4.17333E+00
VARIANCE OF LOGS	=	3.84998E-01

PERCENT TABLE FOR VARIABLE-7 (S-MN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION.

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.833001E+00	6.807702E+01
50.00	2.194112E+00	1.563552E+02
75.00	3.083003E+00	1.210607E+03
90.00	3.416337E+00	2.608177E+03
95.00	3.583004E+00	3.828283E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 8 (S-AG)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		8	8	40.00	40.00		
L		0	8	0.00	40.00		
-4.170E-01	-2.503E-01	0	8	0.00	40.00	3.15	0.15
-2.503E-01	-8.367E-02	1	9	5.00	45.00	1.05	0.00
-8.367E-02	8.300E-02	0	9	0.00	45.00	1.23	1.23
8.300E-02	2.497E-01	1	10	5.00	50.00	1.38	0.11
2.497E-01	4.163E-01	0	11	5.00	55.00	1.50	0.17
4.163E-01	5.830E-01	1	11	0.00	55.00	1.57	1.57
5.830E-01	7.497E-01	1	12	5.00	60.00	1.57	0.21
7.497E-01	9.163E-01	0	13	5.00	65.00	1.52	0.18
9.163E-01	1.083E+00	1	13	0.00	65.00	1.41	1.41
1.083E+00	1.250E+00	0	14	15.00	80.00	1.25	2.43
1.250E+00	1.416E+00	1	15	0.00	80.00	1.08	1.08
1.416E+00	1.583E+00	1	17	5.00	85.00	0.89	0.01
1.583E+00	1.750E+00	0	18	5.00	90.00	0.71	0.12
1.750E+00	1.916E+00	0	18	0.00	90.00	0.54	0.54
1.916E+00	2.083E+00	1	19	5.00	95.00	0.40	0.40
2.083E+00	2.250E+00	1	20	5.00	100.00	0.28	1.86
G		0	20	0.00	100.00	0.50	0.51
H		0	20	0.00	100.00	0.00	0.00
B		0	20	0.00	100.00		
TOTALS LESS H AND B			20				

HISTOGRAM FOR VARIABLE 8 (S-AG)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E-01 XXXXX
 6.808E-01 XXXXX
 9.992E-01 XXXXX
 1.467E+00 XXXXX
 2.153E+00 XXXXX
 3.160E+00 XXXXX
 4.638E+00 XXXXX
 6.808E+00 XXXXX
 9.992E+00 XXXXXXXXXX
 1.467E+01 XXXXX
 2.153E+01 XXXXX
 3.160E+01 XXXXX
 4.638E+01 XXXXX
 6.808E+01 XXXXX
 9.992E+01 XXXXX
 1.467E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-01

MAXIMUM ANTILOG = 1.50000E+02
 GEOMETRIC MEAN = 8.26259E+00
 GEOMETRIC DEVIATION = 5.75515E+00
 VARIANCE OF LOGS = 5.77686E-01

PERCENT TABLE FOR VARIABLE δ ($S - AG$) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.0000000E+35	1.0000000E+35
50.00	8.300100E-02	1.210601E+00
75.00	9.718917E-01	9.373282E+00
90.00	1.583004E+00	3.828283E+01
95.00	2.083005E+00	1.210612E+02
98.00	1.0000000E+35	1.0000000E+35
99.00	1.0000000E+35	1.0000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 9 (S-AS)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST) (THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		13	13	65.00	65.00	
L		0	13	0.00	65.00	
T		0	13	0.00	65.00	
2.250E+00	2.417E+00	2.417E+00	1	14	5.00	70.00
2.417E+00	2.583E+00	2.583E+00	0	14	0.00	70.00
2.583E+00	2.750E+00	2.750E+00	1	15	5.00	75.00
2.750E+00	2.917E+00	2.917E+00	0	15	0.00	75.00
2.917E+00	3.083E+00	3.083E+00	0	15	0.00	75.00
3.083E+00	3.250E+00	3.250E+00	0	15	0.00	75.00
3.250E+00	3.417E+00	3.417E+00	2	17	10.00	85.00
3.417E+00	3.583E+00	3.583E+00	0	17	0.00	85.00
3.583E+00	3.750E+00	3.750E+00	2	19	10.00	95.00
G		1	20	5.00	100.00	
H		0	20	0.00		
B		0	20	0.00		
TOTALS LESS H AND B			20			

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HISTOGRAM FOR VARIABLE 9 (S-AS)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+02	XXXXXX
3.162E+02	XXXXXX
4.642E+02	XXXXXX
6.813E+02	
1.000E+03	
1.468E+03	
2.154E+03	XXXXXXXXXX
3.162E+03	XXXXXXXXXX
4.642E+03	XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG =	2.00000E+02
MAXIMUM ANTILOG =	5.00000E+03
GEOMETRIC MEAN =	1.46780E+03
GEOMETRIC DEVIATION =	3.63506E+00
VARIANCE OF LOGS =	3.14174E-01

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35

PERCENT TABLE FOR VARIABLE 9 (S-AS) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION. THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

50.00	1.000000E+35
75.00	2.750001E+00
90.00	3.583336E+00
95.00	3.750003E+00
98.00	1.000000E+35
99.00	1.000000E+35

	1.000000E+35
	5.623426E+02
	3.831211E+03
	5.623452E+03
	1.000000E+35
	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 10 (S-AU)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/ THEOR FREQ
N	17	17	85.00	85.00		
L	0	17	0.00	85.00		
1.160E-01	1.083E+00	0	0.00	85.00	2.18	2.18
1.083E+00	1.249E+00	1	5.00	90.00	10.20	
1.249E+00	1.416E+00	0	0.00	90.00	5.53	5.53
1.416E+00	6	2	10.00	100.00	18.43	18.43
H	0	20	0.00	100.00	0.18	0.00
B	0	20			0.00	
TOTALS LESS H AND B		20				

HISTOGRAM FOR VARIABLE 10 (S-AU)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

9.985E+00 XXXXX
1.466E+01 XXXXXXXXX
2.151E+01 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 2.00000E+01
GEOMETRIC MEAN = 1.58740E+01
GEOMETRIC DEVIATION = 1.49211E+00
VARIANCE OF LOGS = 3.02064E-02

PERCENT TABLE FOR VARIABLE 10 (S-AU) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4 C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 11 (S-B)

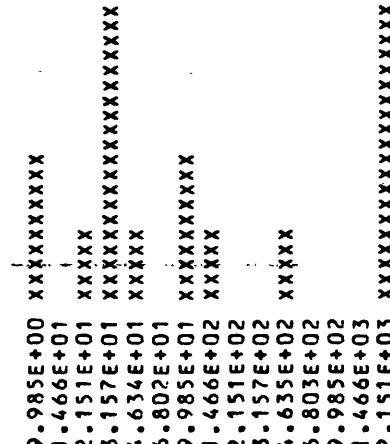
LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ
9.160E-01 - 1.083E+00	0	0	0.00	0.00
1.083E+00 - 1.249E+00	0	2	10.00	10.00
1.249E+00 - 1.416E+00	0	2	0.00	10.00
1.416E+00 - 1.583E+00	1	3	5.00	15.00
1.583E+00 - 1.749E+00	4	7	20.00	35.00
1.749E+00 - 1.916E+00	1	8	5.00	40.00
1.916E+00 - 2.083E+00	0	8	0.00	40.00
2.083E+00 - 2.249E+00	2	10	10.00	50.00
2.249E+00 - 2.416E+00	1	11	5.00	55.00
2.416E+00 - 2.583E+00	0	11	0.00	55.00
2.583E+00 - 2.749E+00	0	11	0.00	55.00
2.749E+00 - 2.916E+00	1	12	5.00	60.00
2.916E+00 - 3.083E+00	0	12	0.00	60.00
3.083E+00 - 3.249E+00	0	12	0.00	60.00
3.249E+00 - 3.416E+00	4	16	20.00	80.00
	4	20	20.00	100.00
TOTALS LESS H AND B	6	20	1.09	1.09
H	0	20	0.94	0.94
B	0	20	3.03	3.03

(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
(NORMAL DIST)

N	L	U	THEOR FREQ (NORMAL DIST)
0	0	0	0.00
0	0	0	0.00
2	1.083E+00	2	10.00
0	1.249E+00	2	10.00
1	1.416E+00	3	15.00
4	1.583E+00	7	20.00
1	1.749E+00	8	5.00
0	1.916E+00	8	0.00
2	2.083E+00	10	10.00
1	2.249E+00	11	5.00
0	2.416E+00	11	0.00
1	2.583E+00	11	0.00
1	2.749E+00	12	5.00
0	2.916E+00	12	0.00
0	3.083E+00	12	0.00
0	3.249E+00	12	0.00
4	3.416E+00	16	20.00
4		20	20.00
6		20	100.00
H		0	1.27
B		0	0.29

TOTALS LESS H AND B

20

HISTOGRAM FOR VARIABLE 11 (S-B)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	= 1.00000E+01
MAXIMUM ANTILOG	= 2.00000E+03
GEOMETRIC MEAN	= 1.15273E+02

GEOMETRIC DEVIATION = 7.12082E+00
VARIANCE OF LOGS = 7.26807E-01

PERCENT TABLE FOR VARIABLE 11 (S-B) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.499335E+00	3.157436E+01
50.00	2.082669E+00	1.209676E+02
75.00	3.249338E+00	1.775571E+03
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4c-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
1.750E+00	1.917E+00	0	0.00	0.00	0.48	0.48
1.917E+00	2.083E+00	2	10.00	10.00	0.98	1.05
2.083E+00	2.250E+00	4	10.00	20.00	2.07	0.00
2.250E+00	2.417E+00	6	10.00	30.00	3.33	0.53
2.417E+00	2.583E+00	4	10.00	50.00	4.09	0.00
2.583E+00	2.750E+00	5	15.00	75.00	3.85	0.34
2.750E+00	2.917E+00	3	18.00	90.00	2.77	0.02
2.917E+00	3.083E+00	1	19.00	95.00	1.52	0.18
G	0	0	0.00	100.00	0.91	0.01
H	0	0	0.00	100.00	0.48	0.48
B	0	0	0.00	100.00		
TOTALS LESS H AND B		20				

TOTALS LESS H AND B 20

HISTOGRAM FOR VARIABLE 12 (S-BA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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6.813E+01 XXXXXXXXXX
1.0000E+02 XXXXXXXXXX
1.468E+02 XXXXXXXXXX
2.154E+02 XXXXXXXXXX
3.162E+02 XXXXXXXXXX
4.642E+02 XXXXXXXXXX
6.813E+02 XXXXX
1.0000E+03 XXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	7.00000E+01
MAXIMUM ANTILOG	=	1.00000E+03
GEOMETRIC MEAN	=	2.39169E+02
GEOMETRIC DEVIATION	=	2.08044E+00
VARIANCE OF LOGS	=	1.01169E-01

PERCENT TABLE FOR VARIABLE 12 (S-BA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE,
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.166668E+00	1.467802E+02
50.00	2.416668E+00	2.610165E+02
75.00	2.5833335E+00	3.831202E+02

90.00
95.00
98.00
99.00

2.750002E+00
2.916669E+00
1.000000E+35
1.000000E+35

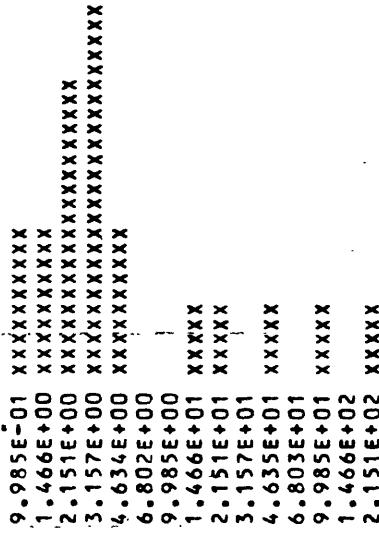
5.623439E+02
8.254086E+02
1.000000E+35
1.000000E+35

Table 4c-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 13 (S-BE)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	{THEOR FREQ - OBS FREQ}**2/ THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00		
8.400E-02	8.267E-02	2	10.00	10.00	2.40	
8.267E-02	2.493E-01	2	10.00	20.00	1.16	
2.493E-01	4.160E-01	4	8	20.00	1.47	
4.160E-01	5.827E-01	5	13	25.00	1.74	
5.827E-01	7.493E-01	2	15	10.00	1.93	
7.493E-01	9.160E-01	0	15	75.00	2.01	
9.160E-01	1.083E+00	0	15	0.00	1.97	
1.083E+00	1.249E+00	1	16	0.00	1.80	
1.249E+00	1.416E+00	1	17	5.00	1.55	
1.416E+00	1.583E+00	0	17	0.00	0.20	
1.583E+00	1.749E+00	-1	18	5.00	0.05	
1.749E+00	1.916E+00	0	18	0.00	0.05	
1.916E+00	2.083E+00	1	19	5.00	0.28	
2.083E+00	2.249E+00	0	19	0.00	1.81	
2.249E+00	2.416E+00	1	20	5.00	0.17	
G	0	20	0.00	100.00	0.18	
H	0	20	0.00	100.00	2.40	
B	0	20	0.00	100.00	2.40	
TOTALS LESS H AND B	20					

TOTALS LESS H AND B

HISTOGRAM FOR VARIABLE 13 (S-BE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

1310

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+00
 MAXIMUM ANTILOG = 2.00000E+02
 GEOMETRIC MEAN = 4.90737E+00

GEOMETRIC DEVIATION = 4.56044E+00
VARIANCE OF LOGS = 4.34290E-01

PERCENT TABLE FOR VARIABLE 13 (S-BE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.910007E-01	1.954343E+00
50.00	4.826678E-01	3.038560E+00
75.00	7.493350E-01	5.614809E+00
90.00	1.749337E+00	5.614835E+01
95.00	2.082671E+00	1.209681E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4c-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 14 (S-BI)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)*2/THEOR FREQ
N		13	13	65.00	65.00		
L		2	15	10.00	75.00		
1.083E+00	1.250E+00	1	15	0.00	75.00	8.43	8.43
1.250E+00	1.416E+00	2	18	5.00	80.00	3.68	1.95
1.416E+00	1.583E+00	0	18	0.00	90.00	5.26	0.49
1.583E+00	1.750E+00	0	18	0.00	90.00	2.33	2.33
1.750E+00	1.916E+00	0	18	0.00	90.00	1.35	1.35
1.916E+00	2.083E+00	1	19	5.00	95.00	0.63	0.63
2.083E+00	2.250E+00	0	19	0.00	95.00	0.24	2.46
2.250E+00	2.416E+00	1	20	5.00	100.00	0.07	0.07
G		0	20	0.00	100.00	0.02	43.70
H		0	20	0.00	100.00	0.00	0.00
B		0	20	0.00	100.00	0.00	0.00
TOTALS LESS H AND B			20				

TOTALS LESS H AND B 20

HISTOGRAM FOR VARIABLE 14 (S-BI)
 MIDPOINTS ARE EXPRESSED AS ANTILOGS

1.467E+01	XXXXXX
2.153E+01	XXXXXXXXXX
3.160E+01	
4.638E+01	
6.808E+01	
9.992E+01	XXXXXX
1.467E+02	
2.153E+02	XXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E+01
 MAXIMUM ANTILOG = 2.00000E+02
 GEOMETRIC MEAN = 4.12892E+01
 GEOMETRIC DEVIATION = 3.17804E+00
 VARIANCE OF LOGS = 2.52163E-01

PERCENT TABLE FOR VARIABLE 14 (S-BI) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE
 DATA VALUE ANTI LOG OF VALUE

25.00	1.0000000E+35
50.00	1.0000000E+35
75.00	1.0000000E+35

90.00
95.00
98.00
99.00
1. 416343E+00
2. 083026E+00
1. 00000E+35
1. 00000E+35
2. 083026E+00
1. 00000E+35
1. 00000E+35
1. 21064E+02
1. 00000E+35
1. 00000E+35
2. 608159E+01
1. 00000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 15 (S-CD)

LOG LIMITS LOWER =	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)
N		16	16	80.00	80.00	
L		0	16	0.00	80.00	
1.250E+00	1.417E+00	0	16	0.00	80.00	6.30
1.417E+00	1.583E+00	1	17	5.00	85.00	4.88
1.583E+00	1.750E+00	2	19	10.00	95.00	4.46
1.750E+00	1.917E+00	0	19	0.00	95.00	2.77
1.917E+00	2.083E+00	0	19	0.00	95.00	1.17
2.083E+00	2.250E+00	0	19	0.00	95.00	0.34
2.250E+00	2.417E+00	0	19	0.00	95.00	0.07
2.417E+00	2.583E+00	1	20	5.00	100.00	0.01
G		0	20	0.00	100.00	0.00
H		0	20	0.00	100.00	0.00
B		0	20	0.00	100.00	0.00
TOTALS LESS H AND B		20				

HISTOGRAM FOR VARIABLE 15 (S-CD)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

35

2.154E+01	XXXXX
3.162E+01	XXXXXX
4.642E+01	
6.813E+01	
1.000E+02	
1.468E+02	
2.154E+02	
3.162E+02	XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	2.00000E+01
MAXIMUM ANTILOG	=	3.00000E+02
GEOMETRIC MEAN	=	4.82057E+01
GEOMETRIC DEVIATION	=	3.043414E+00
VARIANCE OF LOGS	=	2.87101E-01

PERCENT TABLE FOR VARIABLE 15 (S-CD) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35

90.00
95.00
98.00
99.00

1.500001E+00
1.583334E+00
1.000000E+35
1.000000E+35

3.162281E+01
3.831193E+01
1.000000E+35
1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 16 (S-CO)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)*2/THEOR FREQ
N		5	5	25.00	25.00				
L		2	7	10.00	35.00				
7.497E-01	7.497E-01	0	7	0.00	35.00			2.53	
7.497E-01	9.163E-01	3	10	15.00	50.00			0.45	
9.163E-01	1.083E+00	0	10	0.00	50.00			2.04	
1.083E+00	1.250E+00	1	11	5.00	55.00			2.74	
1.250E+00	1.416E+00	12	12	5.00	60.00			1.45	
1.416E+00	1.583E+00	3	15	15.00	75.00			3.13	
1.583E+00	1.750E+00	0	18	15.00	90.00			3.07	
1.750E+00	1.916E+00	1	19	5.00	95.00			1.39	
1.916E+00	2.083E+00	0	19	0.00	95.00			0.07	
G		0	20	5.00	100.00			2.56	
H		0	20	0.00	100.00			0.07	
B		0	20	0.00	100.00			1.83	
TOTALS LESS H AND B			20					0.75	
								0.12	
								0.58	
								0.40	
								0.89	
								0.00	

TOTALS LESS H AND B

20

HISTOGRAM FOR VARIABLE 16 (S-CO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+00	XXXXXXXXXXXXXX
6.808E+00	XXXXXXXXXXXXXX
9.992E+00	XXXXXX
1.467E+01	XXXXXX
2.153E+01	XXXXXXXXXXXXXXXXXX
3.160E+01	XXXXXXXXXXXXXXXXXX
4.638E+01	XXXXXX
6.808E+01	XXXXXX
9.992E+01	XXXXXX

13

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+00
MAXIMUM ANTILOG	=	1.00000E+02
GEOMETRIC MEAN	=	1.79614E+01
GEOMETRIC DEVIATION	=	2.50300E+00
VARIANCE OF LOGS	=	1.58772E-01

PERCENT TABLE FOR VARIABLE 16 (S-CO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE DATA VALUE ANTI LOG OF VALUE

25.00 - 1.000000E+35

50.00	7.496670E-01
75.00	1.416335E+00
90.00	1.583002E+00
95.00	1.749669E+00
98.00	1.000000E+35
99.00	1.000000E+35

Table 4C-Rock Analysis

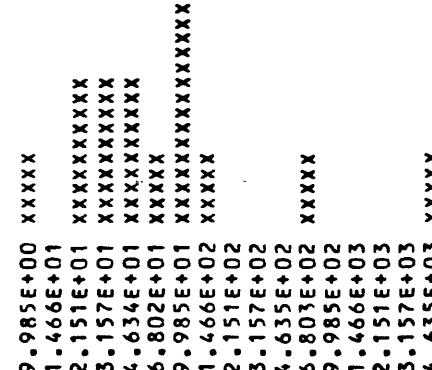
FREQUENCY TABLE FOR VARIABLE 17 (S'-CR)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	6	6	30.00	30.00	30.00	30.00	3.17
L	0	6	0.00	0.00	30.00	30.00	0.06
1.160E-01	1.083E+00	1	7	5.00	35.00	1.27	1.52
1.083E+00	1.249E+00	0	7	0.00	35.00	1.52	1.52
1.249E+00	1.416E+00	2	9	10.00	45.00	1.72	0.05
1.416E+00	1.583E+00	2	11	10.00	55.00	1.84	0.01
1.583E+00	1.749E+00	2	13	10.00	65.00	1.87	0.01
1.749E+00	1.916E+00	1	14	5.00	70.00	1.79	0.35
1.916E+00	2.083E+00	3	17	15.00	85.00	1.63	1.15
2.083E+00	2.249E+00	1	18	5.00	90.00	1.40	0.12
2.249E+00	2.416E+00	0	18	0.00	90.00	1.14	1.14
2.416E+00	2.583E+00	0	18	0.00	90.00	0.88	0.88
2.583E+00	2.749E+00	0	18	0.00	90.00	0.64	0.64
2.749E+00	2.916E+00	1	19	5.00	95.00	0.44	0.70
2.916E+00	3.083E+00	0	19	0.00	95.00	0.29	0.29
3.083E+00	3.249E+00	0	19	0.00	95.00	0.18	0.18
3.249E+00	3.416E+00	0	19	0.00	95.00	0.10	0.10
3.416E+00	3.583E+00	0	19	0.00	95.00	0.06	0.06
3.583E+00	3.749E+00	1	20	5.00	100.00	0.06	15.26
G	0	0	20	0.00	100.00	0.00	0.00
H	0	0	20				
B	0	0	20				
TOTALS LESS H AND B			20				

1.12

20

1.39

HISTOGRAM FOR VARIABLE 17 (S'-CR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 5.00000E+03
 GEOMETRIC MEAN = 7.83881E+01
 GEOMETRIC DEVIATION = 4.90721E+00
 VARIANCE OF LOGS = 4.77253E-01

PERCENT TABLE FOR VARIABLE 17 (S-CR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
---------------------	------------	-------------------

25.00	1.000000E+35	1.0000000E+35
50.00	1.499335E+00	3.157436E+01
75.00	1.971558E+00	9.366076E+01
90.00	2.249336E+00	1.775563E+02
95.00	2.916004E+00	8.241457E+02
98.00	1.000000E+35	1.0000000E+35
99.00	1.000000E+35	1.0000000E+35

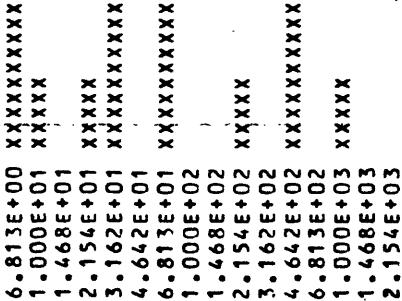
Table 4C-ROCK Analysis

FREQUENCY TABLE FOR VARIABLE 18 (S-CU)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
7.500E+01	9.167E-01	0	0	0.00	0.00	0.00	
9.167E-01	1.083E+00	2	2	10.00	10.00	2.30	
1.083E+00	1.250E+00	1	3	0.00	20.00	0.51	4.30
1.250E+00	1.417E+00	0	5	0.00	25.00	0.59	0.29
1.417E+00	1.583E+00	1	6	5.00	30.00	0.66	0.66
1.583E+00	1.750E+00	2	8	10.00	40.00	0.80	1.82
1.750E+00	1.917E+00	0	8	0.00	40.00	0.86	0.86
1.917E+00	2.083E+00	2	10	10.00	50.00	0.91	1.32
2.083E+00	2.250E+00	0	10	0.00	50.00	0.94	0.94
2.250E+00	2.417E+00	1	11	5.00	55.00	0.97	0.97
2.417E+00	2.583E+00	0	11	0.00	55.00	0.98	0.00
2.583E+00	2.750E+00	2	13	10.00	65.00	0.96	1.13
2.750E+00	2.917E+00	0	13	0.00	65.00	0.93	0.93
2.917E+00	3.083E+00	1	14	5.00	70.00	0.88	0.02
3.083E+00	3.250E+00	0	14	0.00	70.00	0.83	0.83
3.250E+00	3.417E+00	0	14	0.00	70.00	0.76	0.76
3.417E+00	3.583E+00	0	14	0.00	70.00	0.70	0.70
3.583E+00	3.750E+00	0	14	0.00	70.00	0.62	0.62
3.750E+00	3.917E+00	2	16	10.00	80.00	0.55	3.82
3.917E+00	4.083E+00	0	16	0.00	80.00	0.48	0.48
4.083E+00	4.250E+00	1	17	5.00	85.00	0.41	0.85
4.250E+00	4.417E+00	1	18	5.00	90.00	1.66	0.26
		6	20	10.00	100.00	0.00	
	H	0	20				
	B	0	20				
	TOTALS LESS H AND B		20				

TOTALS LESS H AND B

20

HISTOGRAM FOR VARIABLE 18 (S-CU)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

3.162E+03
 4.642E+03
 6.813E+03 XXXXXXXXXX
 1.000E+04
 1.468E+04 XXXXX
 2.154E+04 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.00000E+00
 MAXIMUM ANTILOG = 2.00000E+04
 GEOMETRIC MEAN = 2.20735E+02
 GEOMETRIC DEVIATION = 1.60174E+01
 VARIANCE OF LOGS = 1.45104E+00

PERCENT TABLE FOR VARIABLE 18 (S-CU) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.083334E+00	1.211530E+01
50.00	1.916669E+00	8.254086E+01
75.00	3.500006E+00	3.162318E+03
90.00	4.416674E+00	2.610201E+04
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4c-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ
N	4	4	20.00	20.00
L	2	6	10.00	30.00
T	0	6	0.00	30.00
1.250E+00	1.417E+00	5	25.00	55.00
1.417E+00	1.583E+00	5	25.00	80.00
1.583E+00	1.750E+00	1	5.00	85.00
1.750E+00	1.917E+00	17	0.00	85.00
1.917E+00	2.083E+00	2	10.00	95.00
2.083E+00	2.250E+00	1	5.00	100.00
H	0	20	0.00	100.00
B	0	20	0.00	0.00
TOTALS LESS H AND B		20		

TOTALS LESS H AND B

HISTOGRAM FOR VARIABLE 19 (S-LA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```

2.154E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
4.642E+01 XXXXX
6.813E+01 XXXXX
1.0000E+02 XXXXXXXXXX
1.468E+02 XXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 1.50000E+02
 GEOMETRIC MEAN = 3.58675E+01
 GEOMETRIC DEVIATION = 1.98663E+00
 VARIANCE OF LOGS = 8.88739E-02

PERCENT TABLE FOR VARIABLE 19 (S-LA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.550001E+00	3.548139E+01
90.00	1.916668E+00	8.254067E+01
95.00	2.083335E+00	1.211532E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4c-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 20 (S-MO)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST) (THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		13	13	65.00	65.00	
L		0	13	0.00	65.00	
7.497E-01	7.497E-01	0	13	0.00	65.00	3.91
9.163E-01	9.163E-01	0	14	5.00	70.00	0.99
1.083E+00	1.083E+00	0	14	0.00	70.00	2.60
1.250E+00	1.250E+00	1	15	5.00	75.00	3.12
1.416E+00	1.416E+00	3	18	15.00	90.00	3.18
1.583E+00	1.583E+00	0	18	0.00	90.00	2.75
1.750E+00	1.750E+00	0	18	0.00	90.00	2.03
1.916E+00	1.916E+00	1	19	5.00	95.00	0.47
2.083E+00	2.083E+00	1	20	5.00	100.00	1.27
G		0	20	0.00	100.00	4.09
H		0	20	0.00	100.00	0.00
B		0	20	0.00	100.00	0.00
TOTALS LESS H AND B		20				

HISTOGRAM FOR VARIABLE 20 (S-MO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+00 XXXXX
 6.808E+00
 9.992E+00
 1.467E+01 XXXXX
 2.153E+01 XXXXXXXXXXXXXXXX
 3.160E+01
 4.638E+01 XXXXX
 6.808E+01 XXXXX
 9.992E+01 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.000000E+00
 MAXIMUM ANTILOG = 1.000000E+02
 GEOMETRIC MEAN = 2.37001E+01
 GEOMETRIC DEVIATION = 2.70981E+00
 VARIANCE OF LOGS = 1.87435E-01

PERCENT TABLE FOR VARIABLE 20 (S-MO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION.
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED
PERCENTILE

DATA VALUE ANTI LOG OF VALUE

25.00 - 1.000000E+35

50.00	1.000000E+35
75.00	1.249668E+00
90.00	1.416335E+00
95.00	1.916336E+00
98.00	1.000000E+35
99.00	1.000000E+35

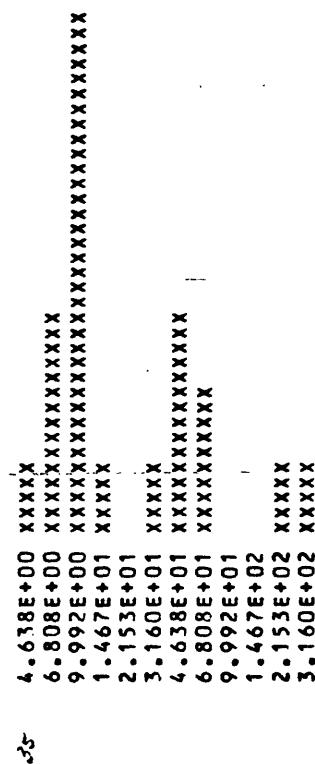
50.00	1.000000E+35
75.00	1.776921E+01
90.00	2.608165E+01
95.00	8.247760E+01
98.00	1.000000E+35
99.00	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST) (THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00	
L		0	0	0.00	0.00	
5.830E+01	7.497E+01	1	1	1.00	0.00	1.54
7.497E+01	9.163E+01	3	4	5.00	5.00	0.02
9.163E+01	1.083E+02	7	11	35.00	55.00	1.12
1.083E+02	1.250E+02	1	12	5.00	60.00	2.44
1.250E+02	1.416E+02	0	12	0.00	60.00	2.55
1.416E+02	1.583E+02	1	13	5.00	65.00	2.41
1.583E+02	1.750E+02	3	16	15.00	80.00	2.05
1.750E+02	1.916E+02	2	18	10.00	90.00	1.58
1.916E+02	2.083E+02	0	18	0.00	90.00	1.10
2.083E+02	2.250E+02	0	18	0.00	90.00	0.69
2.250E+02	2.416E+02	1	19	5.00	95.00	0.39
2.416E+02	2.583E+02	1	20	5.00	100.00	0.35
G		0	20	0.00	100.00	1.54
H		0	20	0.00	100.00	1.54
B		0	20	0.00	100.00	1.54
TOTALS LESS H AND B		20				

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HISTOGRAM FOR VARIABLE 22 (S-NI)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+00
MAXIMUM ANTILOG	=	3.00000E+02
GEOMETRIC MEAN	=	2.10202E+01
GEOMETRIC DEVIATION	=	3.29989E+00
VARIANCE OF LOGS	=	2.688428E-01

PERCENT TABLE FOR VARIABLE 22 (S-NI) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	9.401436E+01	8.712516E+00
50.00	1.059191E+00	1.146018E+01
75.00	1.694113E+00	4.944397E+01
90.00	1.9163316E+00	8.247760E+01
95.00	2.416337E+00	2.608177E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 23 (S-PB)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/ THEOR FREQ
N	0	0	0.00	0.00		
L	4	4	20.00	20.00		
T	0	4	0.00	20.00	3.85	3.85
9.160E-01	1.083E+00	3	15.00	35.00	1.56	1.32
1.083E+00	1.269E+00	3	15.00	50.00	1.83	0.75
1.249E+00	1.416E+00	3	15.00	65.00	2.00	0.50
1.416E+00	1.583E+00	3	15.00	80.00	2.05	0.44
1.583E+00	1.749E+00	0	0.00	80.00	1.97	1.97
1.749E+00	1.916E+00	0	0.00	80.00	1.77	1.77
1.916E+00	2.083E+00	0	0.00	80.00	1.48	1.48
2.083E+00	2.249E+00	0	0.00	80.00	1.17	1.17
2.249E+00	2.416E+00	1	5.00	85.00	0.86	0.02
2.416E+00	2.583E+00	0	0.00	85.00	0.59	0.59
2.583E+00	2.749E+00	2	19.00	95.00	0.38	6.83
2.749E+00	2.916E+00	0	0.00	95.00	0.23	0.23
2.916E+00	3.083E+00	1	20.00	100.00	0.26	2.09
G	0	20	0.00	100.00	0.00	0.00
H	0	20				
I	0	20				
J	0	20				
TOTALS LESS H AND I		20				
B	0	20				

TOTALS LESS H AND B

HISTOGRAM FOR VARIABLE 23 (S-PB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

9.985E+00 XXXXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXXXX
 3.157E+01 XXXXXXXXXXXXXXXXX
 4.634E+01 XXXXXXXXXXXXXXXXX
 6.802E+01 XXXXXXXXXXXXXXXXX
 9.985E+01 XXXXXXXXXXXXXXXXX
 1.466E+02 XXXXXXX
 2.151E+02 XXXXXXX
 3.157E+02 XXXXXXX
 4.634E+02 XXXXXXX
 6.802E+02 XXXXXXX
 9.985E+02 XXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 1.00000E+03
 GEOMETRIC MEAN = 3.95919E+01
 GEOMETRIC DEVIATION = 4.71269E+00
 VARIANCE OF LOGS = 4.53291E-01

PERCENT TABLE FOR VARIABLE 23 (S-PB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

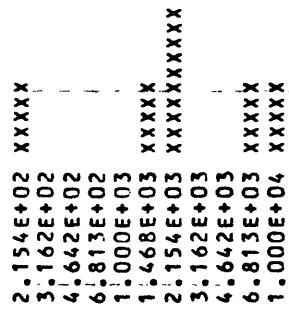
SELECTED PERCENTILE	DATA VALUE	ANTI LOG. OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.249334E+00	1.75554E+01
75.00	1.527112E+00	3.365986E+01
90.00	2.582670E+00	3.825340E+02
95.00	2.749337E+00	5.614835E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 24 (S-SB)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		14	14	70.00	70.00		
L		0	14	0.00	70.00		
T		0	14	0.00	70.00		
2.250E+00	2.417E+00	1	15	0.00	75.00	8.33	8.33
2.417E+00	2.583E+00	0	15	0.00	75.00	1.91	0.43
2.583E+00	2.750E+00	0	15	0.00	75.00	1.89	1.89
2.750E+00	2.917E+00	0	15	0.00	75.00	1.77	1.77
2.917E+00	3.083E+00	0	15	0.00	75.00	1.57	1.57
3.083E+00	3.250E+00	1	16	5.00	80.00	1.31	1.31
3.250E+00	3.417E+00	2	18	10.00	90.00	1.03	0.00
3.417E+00	3.583E+00	0	18	0.00	90.00	0.77	1.96
3.583E+00	3.750E+00	0	18	0.00	90.00	0.54	0.54
3.750E+00	3.917E+00	1	19	5.00	95.00	0.36	0.36
3.917E+00	4.083E+00	1	20	5.00	100.00	0.23	2.67
G		0	20	0.00	100.00	0.28	1.83
H		0	20	0.00	100.00	0.00	0.00
B		0	20				
TOTALS LESS H AND B			20				

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HISTOGRAM FOR VARIABLE 24 (S-SB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	2.00000E+02
MAXIMUM ANTILOG	=	1.00000E+04
GEOMETRIC MEAN	=	2.09273E+03
GEOMETRIC DEVIATION	=	3.97780E+00
VARIANCE OF LOGS	=	3.59571E-01

PERCENT TABLE FOR VARIABLE 24 (S-SB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED
PERCENTILE

	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	2.416667E+00	2.610159E+02
90.00	3.416669E+00	2.610171E+03
95.00	3.916670E+00	8.254105E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 25 (S-SC)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	6	6	30.00	30.00		
L	5	11	25.00	55.00		
7.500E+01 - 9.167E+01	0	11	0.00	55.00	6.13	6.13
9.167E+01 - 1.083E+02	2	13	10.00	65.00	4.54	1.42
1.083E+02 - 1.250E+02	3	16	15.00	80.00	4.33	0.41
1.250E+02 - 1.417E+02	1	17	5.00	85.00	2.94	1.28
1.417E+02 - 1.583E+02	2	19	10.00	95.00	1.42	0.23
1.583E+02 - 1.750E+02	0	19	0.00	95.00	0.49	0.49
G	1	20	5.00	100.00	0.14	5.05
H	0	20	0.00	100.00	0.00	0.00
B	0	20				
TOTALS LESS H AND B		20				

HISTOGRAM FOR VARIABLE 25 (S-SC)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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6.813E+00 XXXXXXXXXX
1.0000E+01 XXXXXXXXXXXXXXXX
1.468E+01 XXXXX
2.154E+01 XXXXXXXXXX
3.162E+01 XXXXX
4.642E+01 XXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.00000E+00
 MAXIMUM ANTILOG = 5.00000E+01
 GEOMETRIC MEAN = 1.34804E+01
 GEOMETRIC DEVIATION = 1.87614E+00
 VARIANCE OF LOGS = 7.46739E-02

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PERCENT TABLE FOR VARIABLE 25 (S-SC) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.027778E+00	1.066052E+01
90.00	1.333335E+00	2.154440E+01
95.00	1.416668E+00	2.610165E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

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DATE 1/14/83

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 27 (S-SR)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST) (THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	10	10	50.00	50.00	50.00	
L	1	11	5.00	55.00		
T	0	11	0.00	55.00		
1.916E+00	2.083E+00	1	12	5.00	60.00	3.44
2.083E+00	2.249E+00	1	13	5.00	65.00	3.43
2.249E+00	2.416E+00	2	15	10.00	75.00	4.24
2.416E+00	2.583E+00	2	17	10.00	85.00	3.94
2.583E+00	2.749E+00	2	19	10.00	95.00	2.75
2.749E+00	2.916E+00	0	19	0.00	95.00	1.43
2.916E+00	3.083E+00	1	20	5.00	100.00	0.56
G	0	20	0.00	100.00		0.21
H	0	20	0.00	100.00		0.00
B	0	20				
TOTALS LESS H AND B		20				

HISTOGRAM FOR VARIABLE 27 (S-SR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

9.985E+01 XXXXX
 1.466E+02 XXXXX
 2.151E+02 XXXXXXXXXX
 3.157E+02 XXXXXXXXXX
 4.634E+02 XXXXXXXXXX
 6.802E+02 XXXXXX
 9.985E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
 MAXIMUM ANTILOG = 1.00000E+03
 GEOMETRIC MEAN = 2.87691E+02
 GEOMETRIC DEVIATION = 2.02307E+00
 VARIANCE OF LOGS = 9.36421E-02

PERCENT TABLE FOR VARIABLE 27 (S-SR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.00000E+35
50.00	1.00000E+35	1.00000E+35
75.00	2.416001E+00	2.606160E+02
90.00	2.666001E+00	4.634485E+02
95.00	2.749335E+00	4.5.614809E+02

98.00
99.00

1.000000E+35
1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS	LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0	0	0.00	0.00		
L	0	0	0	0	0.00	0.00		
9.160E-01	1.083E+00	1.083E+00	1	1	0.00	0.00	1.18	1.18
1.083E+00	1.249E+00	1.249E+00	2	3	5.00	5.00	0.00	0.00
1.249E+00	1.416E+00	1.416E+00	4	7	10.00	15.00	0.14	0.14
1.416E+00	1.583E+00	1.583E+00	4	11	20.00	35.00	1.82	1.82
1.583E+00	1.749E+00	1.749E+00	1	12	5.00	60.00	2.48	2.48
1.749E+00	1.916E+00	1.916E+00	1	13	5.00	65.00	2.67	1.04
1.916E+00	2.083E+00	2.083E+00	3	16	15.00	80.00	2.56	0.95
2.083E+00	2.249E+00	2.249E+00	1	17	5.00	85.00	2.20	0.29
2.249E+00	2.416E+00	2.416E+00	1	18	5.00	90.00	1.69	0.28
2.416E+00	2.583E+00	2.583E+00	1	19	5.00	95.00	1.16	0.02
2.583E+00	2.749E+00	2.749E+00	0	19	0.00	95.00	0.71	0.11
2.749E+00	2.916E+00	2.916E+00	1	20	5.00	100.00	0.39	0.39
G	0	0	0	20	0.00	100.00	1.39	1.39
H	0	20	0	20	0.00	100.00	1.18	1.18
B	0	20	0	20	0.00	100.00		
TOTALS LESS H AND B			20					

TOTALS LESS H AND B = 20

HISTOGRAM FOR VARIABLE 28 (S-V)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```

9.985E+00 XXXXX
1.466E+01 XXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXXXXXX
4.634E+01 XXXXX
6.802E+01 XXXXX
9.985E+01 XXXXXXXXXXXXXXXX
1.466E+02 XXXXX
2.151E+02 XXXXX
3.157E+02 XXXXX
4.635E+02 XXXXX
6.803E+02 XXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	= 1.00000E+01
MAXIMUM ANTILOG	= 7.00000E+02
GEOMETRIC MEAN	= 4.98241E+01
GEOMETRIC DEVIATION	= 3.13036E+00
VARIANCE OF LOGS	= 2.45613E-01

PERCENT TABLE FOR VARIABLE 28 (S-V) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION.

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.332668E+00	2.151134E+01
50.00	1.541001E+00	3.475372E+01
75.00	2.027113E+00	1.064421E+02
90.00	2.416003E+00	2.606171E+02
95.00	2.582670E+00	3.825340E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4c-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 30 (S-Y)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	2	2	10.00	10.00		
T	0	2	0.00	10.00	2.31	2.31
9.160E-01	1.083E+00	5	25.00	35.00	1.55	1.55
1.083E+00	1.249E+00	5	12	60.00	0.21	0.21
1.249E+00	1.416E+00	2	14	70.00	4.28	4.28
1.416E+00	1.583E+00	2	16	80.00	3.34	3.34
1.583E+00	1.749E+00	3	19	95.00	1.93	0.59
1.749E+00	1.916E+00	0	19	95.00	0.83	0.83
1.916E+00	2.083E+00	1	20	100.00	0.34	1.29
H	0	20	0.00	100.00	0.00	0.00
B	0	20				
TOTALS LESS H AND B		20				

TOTALS LESS H AND B 20

HISTOGRAM FOR VARIABLE 30 (S-Y)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

1.985E+00 XXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXXX
 3.157E+01 XXXXXXXXXXXXXXXX
 4.634E+01 XXXXXXXXXXXXXXXX
 6.802E+01 XXXXX
 9.985E+01 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANILOG = 1.00000E+01
 MAXIMUM ANILOG = 1.00000E+02
 GEOMETRIC MEAN = 2.02967E+01
 GEOMETRIC DEVIATION = 2.00698E+00
 VARIANCE OF LOGS = 9.15324E-02

PERCENT TABLE FOR VARIABLE 30 (S-Y) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.182667E+00	1.522885E+01
75.00	1.499335E+00	3.157436E+01
90.00	1.693779E+00	4.940596E+01
95.00	1.749335E+00	5.614809E+01

98.00
99.00

1.000000E+35
1.000000E+35

D0036 GRAPHICAL ANALYSIS - USGS STATPAC (02/07/82)

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Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 31 (S-ZN)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		12	12	60.00	60.00		
L		1	13	5.00	65.00		
T		0	13	0.00	65.00	5.42	5.42
2.250E+00	2.417E+00	1	14	5.00	70.00	2.71	1.08
2.417E+00	2.583E+00	1	15	5.00	75.00	2.96	1.30
2.583E+00	2.750E+00	2	17	10.00	85.00	2.81	0.23
2.750E+00	2.917E+00	0	17	0.00	85.00	2.33	2.33
2.917E+00	3.083E+00	0	17	0.00	85.00	1.68	1.68
3.083E+00	3.250E+00	2	19	10.00	95.00	2.09	0.00
G		1	20	5.00	100.00	0.00	
H		0	20				
B		0	20				
TOTALS LESS H AND B		20					

HISTOGRAM FOR VARIABLE 31 (S-ZN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+02 XXXXX
 2.3162E+02 XXXXX
 4.642E+02 XXXXXXXXXX
 6.813E+02
 1.000E+03
 1.468E+03 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 1.50000E+03
 GEOMETRIC MEAN = 5.68476E+02
 GEOMETRIC DEVIATION = 2.28533E+00
 VARIANCE OF LOGS = 1.28844E-01

PERCENT TABLE FOR VARIABLE 31 (S-ZN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

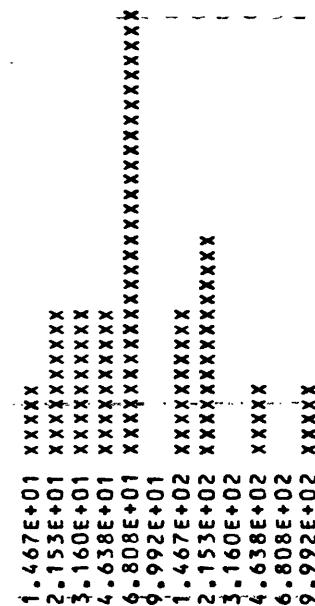
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	2.583334E+00	3.831193E+02
90.00	3.000002E+00	1.000004E+03
95.00	3.25002E+00	1.78288E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 32 (S-ZR)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
1.083E+00	1.250E+00	1	0.00	5.00	0.79	0.79
1.250E+00	1.416E+00	2	3	10.00	15.00	0.04
1.416E+00	1.585E+00	2	5	10.00	25.00	0.32
1.585E+00	1.750E+00	2	7	10.00	35.00	0.00
1.750E+00	1.916E+00	6	13	30.00	65.00	2.47
1.916E+00	2.083E+00	0	13	0.00	65.00	2.71
2.083E+00	2.250E+00	2	15	10.00	75.00	2.77
2.250E+00	2.416E+00	3	18	15.00	90.00	0.07
2.416E+00	2.583E+00	0	18	0.00	90.00	0.67
2.583E+00	2.750E+00	1	19	5.00	95.00	1.88
2.750E+00	2.916E+00	0	19	0.00	95.00	1.28
2.916E+00	3.083E+00	1	20	5.00	100.00	0.07
G	0	20	0.00	100.00		
H	0	20				
I	0	20				
J	0	20				
K	0	20				
L	0	20				
M	0	20				
TOTALS LESS H AND I	20					

60 TOTALS LESS H AND I

HISTOGRAM FOR VARIABLE 32 (S-ZR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E+01
 MAXIMUM ANTILOG = 1.00000E+03
 GEOMETRIC MEAN = 8.08644E+01
 GEOMETRIC DEVIATION = 2.94479E+00
 VARIANCE OF LOGS = 2.20011E-01

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

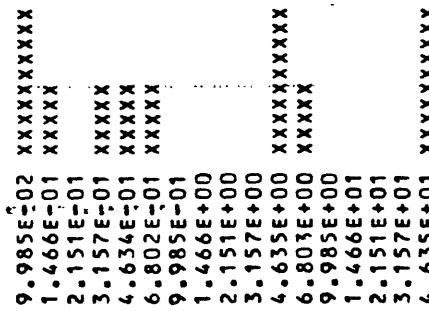
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.583001E+00	3.828256E+01
50.00	1.833002E+00	6.80717E+01
75.00	2.249669E+00	1.776925E+02
90.00	2.416336E+00	2.608171E+02
95.00	2.749670E+00	5.619142E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

FREQUENCY TABLE FOR VARIABLE 34 (AA-AU-P)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)*2/THEOR FREQ
N		9	9	45.00	45.00		
L		0	9	0.00	45.00		
T	-9.173E-01	0	9	0.00	45.00		
-7.507E-01	2	11	10.00	55.00	5.77	5.77	
-5.840E-01	1	12	5.00	60.00	0.64	0.64	
-4.173E-01	0	12	0.00	60.00	0.04	0.04	
-2.507E-01	1	13	5.00	65.00	1.26	1.26	
-2.507E-01	1	14	5.00	70.00	0.06	0.06	
-8.400E-02	1	15	5.00	75.00	0.05	0.05	
-8.400E-02	0	15	0.00	75.00	0.05	0.05	
8.267E-02	2.493E-01	0	15	0.00	75.00	0.04	0.04
2.493E-01	4.160E-01	0	15	0.00	75.00	0.92	0.92
4.160E-01	5.827E-01	0	15	0.00	75.00	0.80	0.80
5.827E-01	7.493E-01	2	17	10.00	85.00	2.58	2.58
7.493E-01	9.160E-01	1	18	5.00	90.00	0.56	0.56
9.160E-01	1.083E+00	0	18	0.00	90.00	0.45	0.45
1.083E+00	1.249E+00	0	18	0.00	90.00	0.35	0.35
1.249E+00	1.416E+00	0	18	0.00	90.00	0.27	0.27
1.416E+00	1.583E+00	0	18	0.00	90.00	0.20	0.20
1.583E+00	1.749E+00	2	20	10.00	100.00	0.44	0.44
G		0	20	0.00	100.00	0.00	0.00
H		0	20				
B		0	20				

TOTALS LESS H AND B

20

HISTOGRAM FOR VARIABLE 34 (AA-AU-P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

MINIMUM ANTILOG = 1.00000E-01
 MAXIMUM ANTILOG = 5.10000E+01
 GEOMETRIC MEAN = 1.39869E+00
 GEOMETRIC DEVIATION = 1.01112E+01
 VARIANCE OF LOGS = 1.00963E+00

PERCENT TABLE FOR VARIABLE 34 (AA-AU-P) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	-8.399801E-02	8.241419E-01
90.00	9.160040E-01	8.261457E+00
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 35 (INST-HG)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	1	1	7.14	7.14		
T	0	1	0.00	7.14	0.92	0.92
-1.750E+00	-1.583E+00	1	7.14	14.29	0.99	0.00
-1.583E+00	-1.417E+00	0	0.00	14.29	1.54	1.54
-1.417E+00	-1.250E+00	5	35.71	50.00	2.03	4.33
-1.250E+00	-1.083E+00	1	8	57.14	2.27	0.71
-1.083E+00	-9.167E-01	1	9	64.29	2.15	0.62
-9.167E-01	-7.500E-01	0	9	64.29	1.72	1.72
-7.500E-01	-5.833E-01	4	13	28.57	92.86	6.85
-5.833E-01	-4.167E-01	1	14	7.14	100.00	0.03
G	0	14	0.00	100.00	0.00	0.00
H	0	14				
B	6	20				
TOTALS LESS H AND B		14				

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HISTOGRAM FOR VARIABLE 35 (INST-HG)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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2.154E-02 XXXXXX
3.162E-02 XXXXXX
4.642E-02 XXXXXXXXXXXXXXXXXXXXXXXXX
6.813E-02 XXXXXX
1.000E-01 XXXXXX
1.468E-01 XXXXXX
2.154E-01 XXXXXXXXXXXXXXXXXXXXXXXXX
3.162E-01 XXXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E-02
 MAXIMUM ANTILOG = 3.00000E-01
 GEOMETRIC MEAN = 8.02586E-02
 GEOMETRIC DEVIATION = 2.44198E+00
 VARIANCE OF LOGS = 1.50344E-01

PERCENT TABLE FOR VARIABLE 35 (INST-HG) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-1.483333E+00	3.285997E-02
50.00	-1.249999E+00	5.623426E-02
75.00	-7.916667E-01	1.615605E-01

90.00	2.417328E-01
95.00	-6.166644E-01
98.00	1.000000E+35
99.00	1.000000E+35
	1.000000E+35
	1.000000E+35
	1.000000E+35

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Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 36 (AA-TE)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-5.833E-01	-5.833E-01	11	11	55.00	55.00	4.19	4.19
-4.167E-01	-4.167E-01	0	11	0.00	0.00	4.67	4.67
-2.500E-01	-2.500E-01	2	13	10.00	65.00	2.17	2.17
-8.333E-02	-8.333E-02	1	14	5.00	70.00	0.04	0.04
8.333E-02	8.333E-02	1	15	5.00	75.00	0.71	0.71
8.333E-02	2.500E-01	2	17	10.00	85.00	0.53	0.53
2.500E-01	4.167E-01	0	17	0.00	85.00	0.06	0.06
4.167E-01	5.833E-01	1	18	5.00	90.00	1.29	1.29
5.833E-01	7.500E-01	0	18	0.00	90.00	0.01	0.01
7.500E-01	9.167E-01	1	19	5.00	95.00	0.58	0.58
9.167E-01	1.083E+00	1	20	5.00	100.00	0.34	0.34
G		0	20	0.00	100.00	1.28	1.28
H		0	20			1.23	1.23
B		0	20			4.19	4.19
TOTALS LESS H AND B			20				

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HISTOGRAM FOR VARIABLE 36 (AA-TE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E-01	XXXXXXXXXXXXXXXXXXXXXX
3.162E-01	XXXXXXXXXXXXXX
4.642E-01	XXXXXXX
6.813E-01	XXXXX
1.000E+00	XXXX
1.468E+00	XXXXXX
2.154E+00	XXXX
3.162E+00	XXXX
4.642E+00	XXXX
6.813E+00	XXXX
1.000E+01	XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANILOG = 2.00000E-01
 MAXIMUM ANILOG = 1.10000E+01
 GEOMETRIC MEAN = 5.14734E-01
 GEOMETRIC DEVIATION = 3.7201E+00
 VARIANCE OF LOGS = 3.255521E-01

PERCENT TABLE FOR VARIABLE 36 (AA-TE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	8.333500E-02	1.211532E+00
90.00	5.833360E-01	3.831210E+00
95.00	9.166700E-01	8.254105E+00
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 37 (AA-CU-P)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	PERCENT (NORMAL DIST)	
N	0	0	0.00	0.00	0.00	
L	3	3	18.75	18.75	3.10	
T	0	3	0.00	18.75	3.10	
1.083E+00	1.083E+00	2	12.50	31.25	2.10	
1.249E+00	1.249E+00	0	0.00	31.25	0.84	
1.416E+00	1.416E+00	3	8	18.75	6.79	
1.583E+00	1.583E+00	0	0.00	50.00	0.91	
1.749E+00	1.749E+00	1	9	6.25	0.97	
1.916E+00	1.916E+00	1	10	6.25	1.00	
2.083E+00	2.083E+00	1	11	6.25	1.02	
2.249E+00	2.249E+00	0	0.00	6.25	0.00	
2.416E+00	2.416E+00	2	12.50	81.25	0.90	
2.583E+00	2.583E+00	0	0.00	81.25	0.82	
2.749E+00	2.749E+00	0	0.00	81.25	0.73	
2.916E+00	2.916E+00	0	0.00	81.25	0.64	
3.083E+00	3.083E+00	3	0.83E+00	1	6.25	0.54
3.249E+00	3.249E+00	0	0.00	87.50	0.45	
3.416E+00	3.416E+00	0	0.00	87.50	0.36	
3.583E+00	3.583E+00	0	0.00	87.50	0.28	
3.749E+00	3.749E+00	1	15	6.25	0.22	
3.916E+00	3.916E+00	0	0.00	93.75	2.86	
H	6	16	6.25	100.00	0.16	
B	4	20	0.00	100.00	0.36	
TOTALS LESS H AND B	16	0	0.00	0.00	0.00	

OC

TOTALS LESS H AND B
16
0
16
4
20

HISTOGRAM FOR VARIABLE 37 (AA-CU-P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

9.985E+00	XXXXXXXXXXXXXX
1.466E+01	XXXXXXXXXXXXXX
2.151E+01	XXXXXXXXXXXXXX
3.157E+01	XXXXXXXXXXXXXX
4.634E+01	XXXXXX
6.802E+01	XXXXXX
9.985E+01	XXXXXX
1.466E+02	XXXXXXXXXXXXXX
2.151E+02	XXXXXXXXXXXXXX
3.157E+02	XXXXXXXXXXXXXX
4.635E+02	XXXXXX
6.803E+02	XXXXXX
9.985E+02	XXXXXX
1.466E+03	XXXXXX
2.151E+03	XXXXXX
3.157E+03	XXXXXX
4.635E+03	XXXXXX
6.803E+03	XXXXXX
9.985E+03	XXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 1.00000E+04
GEOMETRIC MEAN = 1.20289E+02
GEOMETRIC DEVIATION = 9.78558E+00
VARIANCE OF LOGS = 9.81262E-01

PERCENT TABLE FOR VARIABLE 37 (AA-CU-P) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.416001E+00	2.606160E+01
75.00	2.249336E+00	1.75563E+02
90.00	3.349338E+00	2.235312E+03
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 38 (AA-PB-P)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		6	6	30.00	30.00		
L		7	13	35.00	65.00		
T		0	13	0.00	65.00	4.52	4.52
7.497E+01	7.497E+01	1	14	5.00	70.00	1.98	0.49
7.497E+01	9.163E+01	0	14	0.00	70.00	2.27	2.27
9.163E+01	1.083E+00	1	15	5.00	75.00	2.38	0.80
1.083E+00	1.250E+00	1	16	5.00	80.00	2.28	0.71
1.250E+00	1.416E+00	0	16	0.00	80.00	1.99	1.99
1.416E+00	1.583E+00	1	17	5.00	85.00	1.60	0.23
1.583E+00	1.750E+00	0	17	0.00	85.00	1.18	1.18
1.750E+00	1.916E+00	0	17	0.00	85.00	0.79	0.79
1.916E+00	2.083E+00	1	18	5.00	90.00	0.49	0.54
2.083E+00	2.250E+00	1	19	5.00	95.00	0.27	1.93
2.250E+00	2.416E+00	1	20	5.00	100.00	0.25	2.20
G		0	20	0.00	100.00	0.00	0.00
H		0	20				
B		0	20				
TOTALS LESS H AND B							
			20				

70
 HISTOGRAM FOR VARIABLE 38 (AA-PB-P)
 MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+00 XXXXX
 6.808E+00 XXXXX
 9.992E+00 XXXXX
 1.467E+01 XXXXX
 2.153E+01 XXXXX
 3.160E+01 XXXXX
 4.638E+01 XXXXX
 6.808E+01 XXXXX
 9.992E+01 XXXXX
 1.467E+02 XXXXX
 2.153E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
 MAXIMUM ANTILOG = 2.40000E+02
 GEOMETRIC MEAN = 3.67609E+01
 GEOMETRIC DEVIATION = 4.41402E+00
 VARIANCE OF LOGS = 6.15811E+01

PERCENT TABLE FOR VARIABLE 38 (AA-PB-P) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE

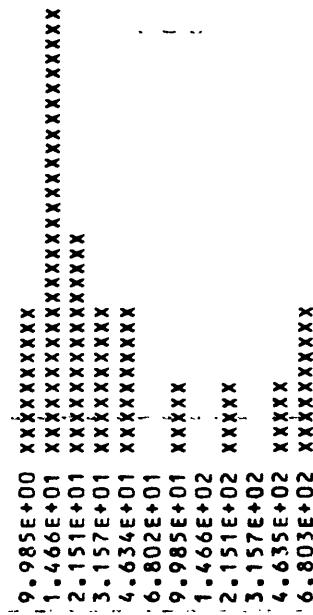
	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.083001E+00	1.210601E+01
90.00	2.083003E+00	1.210606E+02
95.00	2.249670E+00	1.776929E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 39 (AA-ZN-P)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
9.160E-01	1.081E+00	2	10.00	10.00	2.53	2.53
1.083E+00	1.249E+00	6	30.00	40.00	0.29	0.29
1.249E+00	1.416E+00	3	15.00	55.00	10.35	10.35
1.416E+00	1.583E+00	2	10.00	65.00	0.43	0.43
1.583E+00	1.749E+00	2	10.00	75.00	0.02	0.02
1.749E+00	1.916E+00	0	0.00	75.00	0.03	0.03
1.916E+00	2.083E+00	1	16.00	80.00	2.07	2.07
2.083E+00	2.249E+00	0	0.00	80.00	0.33	0.33
2.249E+00	2.416E+00	1	17.00	85.00	1.39	1.39
2.416E+00	2.583E+00	0	0.00	85.00	0.00	0.00
2.583E+00	2.749E+00	1	18.00	90.00	0.68	0.68
2.749E+00	2.916E+00	2	20.00	100.00	0.42	0.42
		0	0.00	100.00	0.48	0.48
H	0	20			2.53	2.53
TOTALS LESS H AND B	20					
B	0	20				

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HISTOGRAM FOR VARIABLE 39 (AA-ZN-P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 6.40000E+02
 GEOMETRIC MEAN = 3.86967E+01
 GEOMETRIC DEVIATION = 3.86345E+00
 VARIANCE OF LOGS = 3.44540E-01

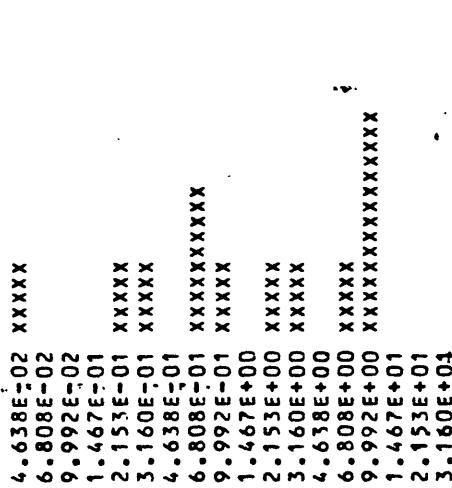
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.166001E+00	1.465550E+01
50.00	1.360445E+00	2.293218E+01
75.00	1.749335E+00	5.614809E+01
90.00	2.749337E+00	5.614835E+02
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4c-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 40 (AA-AG-P)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	3	3	15.00	15.00		
L	4	7	20.00	35.00		
-1.417E+00	1.250E+00	1	5.00	35.00	2.63	0.08
-1.250E+00	1.084E+00	0	0.00	40.00	0.75	0.87
-1.084E+00	9.170E-01	0	0.00	40.00	0.87	0.87
-9.170E-01	7.503E-01	0	0.00	40.00	0.99	0.99
-7.503E-01	5.837E-01	1	5.00	45.00	1.10	1.10
-5.837E-01	4.170E-01	1	5.00	50.00	1.19	0.03
-4.170E-01	2.503E-01	0	0.00	50.00	1.25	0.05
-2.503E-01	8.366E-02	2	10.00	60.00	1.28	1.28
-8.366E-02	8.300E-02	1	5.00	65.00	1.24	0.05
8.300E-02	2.497E-01	0	0.00	65.00	1.18	0.05
2.497E-01	4.163E-01	1	5.00	70.00	1.09	0.01
4.163E-01	5.830E-01	1	5.00	75.00	0.98	0.00
5.830E-01	7.497E-01	0	0.00	75.00	0.86	0.86
7.497E-01	9.163E-01	1	5.00	80.00	0.74	0.09
9.163E-01	1.083E+00	3	15.00	95.00	0.61	0.27
1.083E+00	1.250E+00	0	0.00	95.00	0.50	0.50
1.250E+00	1.416E+00	0	0.00	95.00	0.39	0.39
1.416E+00	1.583E+00	0	0.00	95.00	0.30	0.30
1.583E+00	1.750E+00	0	0.00	95.00	0.23	0.23
1.750E+00	1.916E+00	1	5.00	100.00	0.52	0.43
G	0	0	0.00	100.00	0.00	0.00
H	0	0	0.00			
B	0	0	0.00			
TOTALS LESS H AND B		20				

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63HISTOGRAM FOR VARIABLE 40 (AA-AG-P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+01
6.808E+01 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-02
MAXIMUM ANTILOG = 7.50000E+01
GEOMETRIC MEAN = 2.00891E+00
GEOMETRIC DEVIATION = 7.06257E+00
VARIANCE OF LOGS = 7.20738E-01

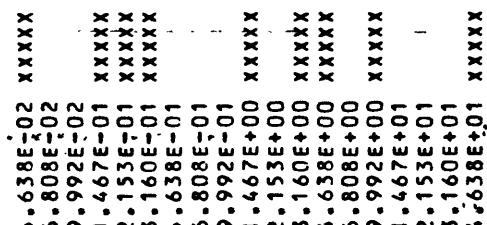
PERCENT TABLE FOR VARIABLE 40 (AA-AAG-P) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	-4.169980E-01	3.828265E-01
75.00	5.830040E-01	3.828283E+00
90.00	1.027449E+00	1.065245E+01
95.00	1.083005E+00	1.210612E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 41 (AA-CD-P)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	8	8	60.00	60.00		
L	3	11	15.00	55.00		
-1.417E+00	-1.250E+00	0	0.00	55.00	4.36	4.36
-1.250E+00	-1.084E+00	1	5.00	60.00	0.01	0.01
-1.084E+00	-9.170E-01	0	0.00	60.00	1.21	1.21
-9.170E-01	-7.503E-01	1	5.00	65.00	1.31	1.31
-7.503E-01	-5.837E-01	1	5.00	70.00	0.10	0.10
-5.837E-01	-4.170E-01	1	5.00	75.00	0.11	0.11
-4.170E-01	-2.503E-01	0	0.00	75.00	0.10	0.10
-2.503E-01	-8.366E-02	0	0.00	75.00	1.30	1.30
-8.366E-02	8.300E-02	0	0.00	75.00	1.21	1.21
8.300E-02	2.497E-01	1	5.00	80.00	1.09	1.09
2.497E-01	4.163E-01	0	0.00	80.00	0.00	0.00
4.163E-01	5.830E-01	1	5.00	85.00	0.66	0.66
5.830E-01	7.497E-01	1	5.00	90.00	0.52	0.52
7.497E-01	9.163E-01	0	0.00	90.00	0.41	0.41
9.163E-01	1.083E+00	1	5.00	95.00	0.30	0.30
1.083E+00	1.250E+00	0	0.00	95.00	0.22	0.22
1.250E+00	1.416E+00	0	0.00	95.00	0.16	0.16
1.416E+00	1.583E+00	0	0.00	95.00	0.11	0.11
1.583E+00	1.750E+00	1	5.00	100.00	0.19	0.19
	6	0	0.00	100.00	0.00	0.00
G						
H		0	20			
B		0	20			
TOTALS LESS H AND B		20				

HISTOGRAM FOR VARIABLE 41 (AA-CD-P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E-02
MAXIMUM ANTILOG	=	4.90000E+01
GEOMETRIC MEAN	=	1.25637E+00
GEOMETRIC DEVIATION	=	9.64987E+00
VARIANCE OF LOGS	=	9.69283E-01

PERCENT TABLE FOR VARIABLE 41 (AA-CO-P) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	-4.169980E-01	3.828265E-01
90.00	7.496710E-01	5.619155E+00
95.00	1.083005E+00	1.210612E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 42 (AA-BI-P)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ
N	12	12	60.00	60.00
L	1	13	5.00	65.00
T	0	13	0.00	65.00
8.400E+02	8.267E+02	1	14	0.00
8.267E+02	2.493E+01	0	14	70.00
2.493E+01	4.160E+01	1	15	5.00
4.160E+01	5.827E+01	1	16	5.00
5.827E+01	7.493E+01	0	16	0.00
7.493E+01	9.160E+01	1	17	5.00
9.160E+01	1.083E+02	1	18	5.00
1.083E+00	1.249E+00	0	18	0.00
1.249E+00	1.416E+00	0	18	0.00
1.416E+00	1.583E+00	0	18	0.00
1.583E+00	1.749E+00	0	18	0.00
1.749E+00	1.916E+00	2	20	10.00
G	0	20	0.00	100.00
H	0	20	0.00	100.00
I	0	20	0.00	100.00
B	0	20	0.00	100.00
TOTALS LESS H AND B	20			

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	12	12	60.00	60.00
L	1	13	5.00	5.05
T	0	13	0.00	0.05
8.400E+02	8.267E+02	1	14	0.00
8.267E+02	2.493E+01	0	14	70.00
2.493E+01	4.160E+01	1	15	5.00
4.160E+01	5.827E+01	1	16	5.00
5.827E+01	7.493E+01	0	16	0.00
7.493E+01	9.160E+01	1	17	5.00
9.160E+01	1.083E+02	1	18	5.00
1.083E+00	1.249E+00	0	18	0.00
1.249E+00	1.416E+00	0	18	0.00
1.416E+00	1.583E+00	0	18	0.00
1.583E+00	1.749E+00	0	18	0.00
1.749E+00	1.916E+00	2	20	10.00
G	0	20	0.00	100.00
H	0	20	0.00	100.00
I	0	20	0.00	100.00
B	0	20	0.00	100.00
TOTALS LESS H AND B	20			

HISTOGRAM FOR VARIABLE 42 (AA-BI-P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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6> 9.985E+01 XXXXX
    1.466E+00
    2.151E+00 XXXXX
    3.157E+00 XXXXX
    4.634E+00
    6.802E+00 XXXXX
    9.985E+00 XXXXX
    1.466E+01
    2.151E+01
    3.157E+01
    4.635E+01
    6.803E+01 XXXXXXXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	= 1.00000E+00
MAXIMUM ANTILOG	= 7.00000E+01
GEOMETRIC MEAN	= 8.13215E+00
GEOMETRIC DEVIATION	= 5.29416E+00
VARIANCE OF LOGS	= 5.23882E+01

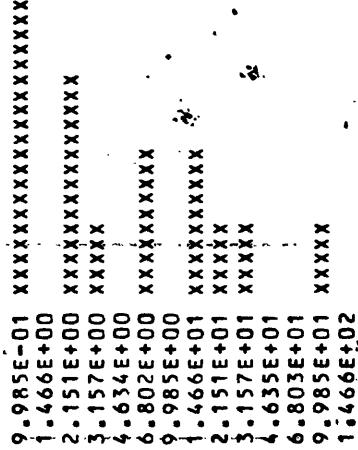
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	4.160010E-01	2.606160E+00
90.00	1.082669E+00	1.209676E+01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

FREQUENCY TABLE FOR VARIABLE 43 (AA-SB-P)

Table 4C-Rock Analysis

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
-8.400E-02	8.267E-02	0	0	0.00	0.00	2.75	2.75
8.267E-02	2.493E-01	4	4	20.00	0.00	19.31	19.31
2.493E-01	4.160E-01	3	7	15.00	35.00	0.68	0.68
4.160E-01	5.827E-01	1	8	5.00	40.00	0.75	0.75
5.827E-01	7.493E-01	0	8	0.00	40.00	0.89	0.89
7.493E-01	9.160E-01	2	10	10.00	50.00	0.94	1.20
9.160E-01	1.083E+00	0	10	0.00	50.00	0.98	0.98
1.083E+00	1.249E+00	2	12	10.00	60.00	1.00	0.99
1.249E+00	1.416E+00	1	13	5.00	65.00	1.01	0.00
1.416E+00	1.583E+00	1	14	5.00	70.00	1.01	0.00
1.583E+00	1.749E+00	0	14	0.00	70.00	0.98	0.98
1.749E+00	1.916E+00	0	14	0.00	70.00	0.95	0.95
1.916E+00	2.083E+00	1	15	5.00	75.00	0.90	0.01
2.083E+00	2.249E+00	0	15	0.00	75.00	0.83	0.83
2.249E+00	2.416E+00	0	15	0.00	75.00	0.76	0.76
2.416E+00	2.583E+00	0	15	0.00	75.00	0.69	0.69
2.583E+00	2.749E+00	0	15	0.00	75.00	0.61	0.61
2.749E+00	2.916E+00	0	15	0.00	75.00	0.53	0.53
2.916E+00	3.083E+00	1	16	5.00	80.00	0.46	0.64
3.083E+00	3.249E+00	2	18	10.00	90.00	0.39	6.73
3.249E+00	3.416E+00	0	18	0.00	90.00	0.32	0.32
3.416E+00	3.583E+00	1	19	5.00	95.00	0.26	2.07
3.583E+00	3.749E+00	0	19	0.00	95.00	0.21	0.21
3.749E+00	3.916E+00	1	20	5.00	100.00	0.17	0.17
	G	0	20	0.00	100.00	2.75	2.75
	H	0	20	0.00			
	B	0	20	0.00			
TOTALS LESS H AND B							
20							

HISTOGRAM FOR VARIABLE 43 (AA-SB-P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.151E+02
 3.157E+02
 4.635E+02
 6.803E+02
 9.985E+02 XXXXX
 1.466E+03 XXXXXXXXXX
 2.151E+03 XXXXX
 3.157E+03 XXXXX
 4.635E+03 XXXXX
 6.803E+03 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+00
 MAXIMUM ANTILOG = 5.80000E+03
 GEOMETRIC MEAN = 2.21297E+01
 GEOMETRIC DEVIATION = 2.04342E+01
 VARIANCE OF LOGS = 1.71704E+00

PERCENT TABLE FOR VARIABLE 43 (AA-SB-P) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

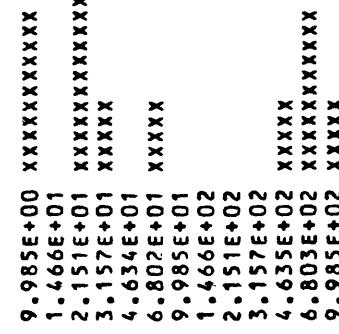
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.937783E-01	1.562350E+00
50.00	9.160020E-01	8.241419E+00
75.00	2.082671E+00	1.209681E+02
90.00	3.249340E+00	1.775579E+02
95.00	3.582674E+00	3.825375E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 44 (CM-AS)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)
N		6	6	31.58	31.58	
L		2	8	10.53	42.11	
1.083E+00	1.083E+00	0	8	0.00	42.11	4.10
1.249E+00	1.249E+00	2	10	10.53	52.63	0.35
1.416E+00	1.416E+00	0	10	0.00	52.63	1.32
1.583E+00	1.583E+00	3	13	15.79	68.42	1.69
1.749E+00	1.749E+00	1	14	5.26	73.68	1.61
1.916E+00	1.916E+00	0	14	0.00	73.68	1.66
2.083E+00	2.083E+00	1	15	5.26	78.95	1.62
2.249E+00	2.249E+00	2	17	10.53	84.21	0.26
2.416E+00	2.416E+00	0	17	0.00	84.21	0.18
2.583E+00	2.583E+00	0	18	10.53	94.74	0.15
2.749E+00	2.749E+00	2	20	10.53	94.74	0.93
2.916E+00	2.916E+00	-	20	19	5.26	0.72
		6	0	19	100.00	0.62
	H	0	19	0	100.00	0.23
	B	1	20			0.00
TOTALS LESS H AND B			19			

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HISTOGRAM FOR VARIABLE 44 (CM-AS)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	= 1.00000E+01
MAXIMUM ANTILOG	= 1.20000E+03
GEOMETRIC MEAN	= 7.73121E+01
GEOMETRIC DEVIATION	= 6.64906E+00
VARIANCE OF LOGS	= 6.76935E-01

PERCENT TABLE FOR VARIABLE 44 (CM-AS) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999991E 50

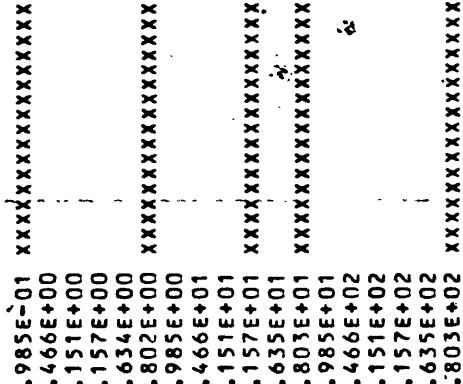
SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.666001E+00	4.634485E+01
90.00	2.841004E+00	6.934319E+02
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4c-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 4S (AA-HG)

LOG LIMITS LOWER -	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
-8.400E+02	8.267E+02	0	0	0.00	0.00		
8.267E+02	2.493E+01	0	1	0.00	0.00	0.39	0.39
2.493E+01	4.160E+01	0	1	0.00	16.67	6.22	6.22
4.160E+01	5.827E+01	0	1	0.00	16.67	0.15	0.15
5.827E+01	7.493E+01	0	1	0.00	16.67	0.18	0.18
7.493E+01	9.160E+01	1	2	0.00	16.67	0.21	0.21
9.160E+01	1.083E+02	0	2	0.00	33.33	0.24	0.24
1.083E+02	1.249E+02	0	2	0.00	33.33	0.27	0.27
1.249E+02	1.416E+02	0	2	0.00	33.33	0.30	0.30
1.416E+02	1.583E+02	0	1	3.33	50.00	0.32	0.32
1.583E+02	1.749E+02	0	3	0.00	50.00	0.35	0.35
1.749E+02	1.916E+02	1	4	16.67	66.67	1.26	1.26
1.916E+02	2.083E+02	0	4	0.00	66.67	0.33	0.33
2.083E+02	2.249E+02	0	4	0.00	66.67	0.31	0.31
2.249E+02	2.416E+02	0	4	0.00	66.67	0.29	0.29
2.416E+02	2.583E+02	0	4	0.00	66.67	0.26	0.26
2.583E+02	2.749E+02	0	4	0.00	66.67	0.24	0.24
2.749E+02	2.916E+02	1	5	16.67	83.33	3.09	3.09
2.916E+02	3.083E+02	1	6	16.67	100.00	0.81	0.81
G		0	6	0.00	100.00	0.39	0.39
H		0	6				
B		14	20				
TOTALS LESS H AND B							
6							

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HISTOGRAM FOR VARIABLE 4S (AA-HG)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E+00
MAXIMUM ANTILOG	=	8.90000E+02
GEOMETRIC MEAN	=	4.48521E+01
GEOMETRIC DEVIATION	=	1.40737E+01
VARIANCE OF LOGS	=	1.31884E+00

PERCENT TABLE FOR VARIABLE 45 (AA-HG) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	4.993345E-01	3.157436E+00
50.00	1.582670E+00	3.825340E+01
75.00	2.416005E+00	2.606183E+02
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35